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ORIGINAL ARTICLES.

THE RELATION OF DISEASE AND OF MORBID CONDITIONS OTHER THAN THOSE LOCATED IN THE EYE TO THE FORMATION OF CATARACT.*

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The etiology of cataract is by no means always clear, and independently of the studies which pertain to the pathological anatomy of opacity of the crystalline lens, much interest resides in the causes which may originate clouding of this structure. I omit entirely reference to the influence of age, sex, occupation, heredity, diseases of the eye, and accommodative strain, each and all of which are important factors, and desire to call attention to those cases which bear some relation to nutritive disturbances, in their turn dependent upon constitutional disease, or upon more localized extra-ocular conditions. It is evident that trustworthy information on this point could be obtained, were it the custom of general practitioners to make as careful examination of the transparent media and fundus of the eye as they do of other organs, in the study of the symptomatology of the cases of general disease which come under their care. In the absence of such systematic examinations, ophthalmic surgeons are forced to gather the evidence, except in a few instances, from reports scattered here and there through the literature, many of which are valueless, inasmuch as they prove nothing more than probable coincidence. Therefore this topic has been introduced for the consideration of a general medical society, hoping that it may stimulate research in this line. Doubtless useful data could be gathered were general practitioners and ophthalmologists—serving at the same time in large hospitals—to combine their efforts in the study of each case of constitutional disease from its beginning to its close. How much reliable information would thereby be added to the already large store of knowledge belonging to medical ophthalmology can only be imagined.

For convenience of study, I have arranged the cases in which disease bears some relation to the formation of cataract into:

I. IDIOPATHIC FEVERS AND ALLIED DISEASES.

(*a*) *Typhus and Typhoid Fever.*—It is a matter of common observation that the clinical history of cataract formation will not infrequently reveal that the patient refers marked failure of sight to some decided febrile disturbance, but it is difficult to prove that this has positively been the cause of the depreciation in vision. For example, Galezowski[1] investigated 4776 cataracts with reference to their etiology, and attributed by far the greatest number—1528—to age, as they occurred between the sixtieth and the seventieth years.

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1 "De l'Etiologie de la Cataracte," Recueil d'Ophth., p. 17, 1883.

therefore, the majority were representatives of a retrograde process in a changing organism. The remainder, exclusive of those which occured under the influence of injury and heredity, were ascribed to excesses, accommodative strain, and finally, to debility of the body as the result of constitutional and febrile illnesses—that is to say, this debility hastened the cataractous process.

A little more to the point, but none the less of indifferent value, are the observations of Trelat[2] on cataracts following typhoid fever, in which he describes double, semi-soft cataracts in a young girl which began to develop during convalescence from typhoid fever. Arens[3] examined two young people, brother and sister, who developed double cataract, which became total in one eye, after an attack of typhus fever. A good result after extraction was secured. Fontan[4] reports three cases of post-typhoid cataract (cataracta punctata) which he believes were the result of mechanical obstruction of the circulation. Two of these cases, one a twenty-eight-year-old man and the other a forty-two-year-old woman, progressed to maturity and required extraction. There is no evidence from this paper, however, than Fontan was aware of the condition of the transparent media before the typhoidal attack.

(*b*) *The Exanthemata.*—As the malnutrition of typhus and typhoid fever may perhaps be responsible for lenticular opacities, likewise this is true of the various exanthemata, quite independently of the fact that these diseases may cause local inflammatory conditions which would determine the opacification. Romiée,[5] for example, analyzed 44 cases of cataracta punctata, and attributed the pathogenic cause to typhoid fever 17 times, variola 7 times, and scarlet fever 3 times. Chlorosis was made responsible 7 times, and the remaining 10 instances were ascribed to diverse maladies—suppuration, heart disease, rachitis, etc. The author seeks to explain the lenticular opacities by an increase in the density of the serum and changes in the relation of the lens to the aqueous humor.

2 Gaz. des Hopitaux, 1879, p. 417.

3 "Zur Pathogenese des grauen Starrs nach Typhus," Abstract, Nagel's Jahresbericht, 1885, vol. xvi. p. 428.

4 Rec. d'Ophth., 3 serie, 9, 1887.

5 Journal de Med. de Bruxelles, 1873, quoted by Fontan, loc. cit.

(*c*) *Whooping-cough.*—For the most part, the reports concerning the relation between whooping-cough and cataract formation are vague, as, for example, such indefinite cases as were reported in pre-ophthalmoscopic days by Wright,[6] who records the case of a baby, aged eighteen months which was able to see for twelve months, then had whooping-cough, and afterward cataract.

(*d*) *Malaria.*—Inasmuch as severe malarial fever of any type may be accompanied by lesions in the vitreous and the choroid—for example, hemorrhage, which after absorption leaves membranous opacities and areas of atrophic choroiditis—there is no reason why cataract should not form. A more direct connection than this seems doubtful. Bagot,[7] however, describes two cases in mulattoes who, directly at the close of a violent malarial illness, suffered from diminution of visual acuity, and a few months later double soft cataract was evident. After operative interference the visual acuity returned to normal, and there were no lesions in the fundus oculi.

(*e*) *Epidemic Influenza.*—During the prevalence of epidemic influenza, or la grippe, so fresh in the minds of all of us, a large amount of attention was directed to the ocular lesions, and a great variety of affections, inflammatory and otherwise, which occurred in the eyes of the sufferers were attributed, and no doubt in many instances rightly, to the influence of this extraordinary disease. It would be out of place to attempt a review of the literature, which is very considerable, but as an example of what was observed, I may quote a single analysis, namely, that of Rampoldi.[8] Among 532 eye patients whom he saw during the months of February and March, 1890, there were 48 who had acquired their ocular trouble during or after an attack of influenza. These affections were acute conjunctivitis, conjunctival abscess, abrasion of the corneal epithelium, corneal infiltrations, corneal abscess, iridocyclitis, serpent ulcer, serous iritis, choroiditis, detachment of the retina, and affections pertaining to the external and internal ocular muscles.

6 Western Med. and Phys. Journ., Cincinnati, 1827-28, 1, 428-431.

7 Annales d'Oculistique, November, 1891, tome cvi. p. 338.

8 Ann. di Ottalm., vol. xix., 1, p. 70. Abstract, Archives of Ophthalmology, vol. xx. p. 295.

Therefore, it is not unlikely that this disease, producing such serious inflammatory lesions, may be followed by cataract, and this probably is the explanation of such cases as have been reported.

One case of several occuring in my practice may be quoted: Private patient, female, aged fifty-five years, applied for treatment on the 25th of July, 1891; in good health except during the winters of '90 and '91, when she had sharp attacks of la grippe. Following these, vision began to fail, associated with a dull, aching pain in the eyes. In the right eye there were large striæ in the lens down and in; the optic disk a vertical oval, of good color, but with undue broadening of the scleral ring. In the left eye large punctate opacities in the posterior cortical and also in the vitreous. No hemorrhages in the eye-grounds. Previous to these attacks of la grippe the media were clear. Now it is very evident that one of the common lesions of influenza was present in this patient, namely, vitreous disease, which in its turn was no doubt responsible for the formation of cataract that has since gone on to maturity in the left eye.

II. CONSTITUTIONAL DISEASE.

(*a*) *Gout.*—This ubiquitous disease has been made responsible for a great variety of ocular affections, and, naturally, cataract has not escaped. Zychon[9] contributes an article upon the influence of gout in ophthalmic disorders. Michel, who abstracts the article in the *Jahresbericht f. Ophthalmologie*, vol. xvi, p. 318, somewhat sarcastically states: "We know from Zychon's teacher, Galezowski, that gout has been made responsible for all possible and impossible eye diseases, and so we are not surprised when to the list of gouty ocular affections the following are added: lithiasis of the lids, dry eczema, subconjunctival ecchymosis, conjunctivitis, calcareous degeneration of Bowman's membrane, scleritis and iritis, choroiditis and cyclitis, retinitis and choroido-retinitis, *cataract*, glaucoma, arterial thromboses, muscular palsies, and, finally, migraine." Now, in spite of Michel's unnecessary criticism of this author, many of these affections are undoubtedly gouty, and because the uveal tract falls under its baleful influence cataract may be indirectly caused by this disease, but not, however, without the intervention of inflammatory lesions, which attack those portions of the eye particularly concerned in the nutrition of the crystalline lens.

(*b*) *Rachitis.*—Punctate cataract—if the report of Romiée[1] may be credited—sometimes occurs in connection with rachitis, and Nicati[2] brings the total cataracts (not congenital) which are sometimes found in children into etiological relationship with rachitis.

One form of cataract, variously called zonular or lamellar, which anatomically consists of a narrow zone of degenerative change in the lens fibres situated between the nuclear and cortical areas, has often been attributed to rachitis. The true cause, however, is not certainly known. The congenital variety is probably due to some developmental defect; in the form arising in early infancy some fault in nutrition has occured; most often the subjects are rachitic and present the teeth and cranial asymmetry peculiar to this affection. A history of convulsions is common, and the dental defects which are present in the form of lines, furrows or terraces, running transversely across the incisors or canines, are considered by Hutchinson tobe due to the mercury which in all probability was given for the convulsions, which in their turn caused the cataract. Therefore, the cause does not reside in rachitis itself, but in the frequent, severe, and long-continued convulsions to which its subjects are liable. Moreover, as Knies,[3] quoting Arlt, points out, the cause does not pertain alone to the general convulsions, but to the disturbance of the lens brought about by the severe ciliary muscle-cramp which is said to be present in all universal convulsive affections. Such a result can obtain, however, only in the earlier years of life, while the process of development in the lens is still an active one.

(*c*) *Constitutional Syphilis.*—This disease, like other affections which are prone to attack the uveal tract, is not infrequently followed by secondary cataract as the result of disturbance in the nutritive processes of the eye. Some authors,

9 "De la Goutte oculaire," Rec. d' Ophth., 1885.

1 Loc. Cit.

2 "Cataractes et Lesions dentaires des Rachitiques," Abstract, Jahresbericht f. Ophthalmologie, 1879, vol. x. p. 341.

3 Die Beziehungen des Sehorgans und seiner Erkrankungen zu de ubrigen Krankheiten des Korpers und seiner Organe. Wiesbaden, 1893, p. 467.

however, have described so-called true syphilitic cataract. For example Bos[4] records several examples from Badal's clinic, and refers to others which have been seen by Heller[5] and Romiée.[6] He divides these cases into two classes: 1. Capsular cataracts which are associated with iritis, etc.; 2. Lenticular or true cataracts, which are rare and directly due to syphilis. They are soft and appear in the second period of this disease, presumably without the intervention of inflammatory processes in the ocular coats.

(*d*) *Diabetes.*—The usual answer to the question "What is the most frequent ocular lesion in diabetes," is "cataract." Ever since the observations of France,[7] in England, and the still earlier ones of Mackenzie and Duncan, as well as those of Von Graefe, to the present time, an enormous literature has accumulated with reference to the relation of saccharine diabetes to the formation of cataract, and its influence upon operative interference in this disease. It has become the rule to examine the urine carefully for sugar in all cases of cataract, especially when it develops in young subjects, and it is well known that in fully 1 per cent. of the cases sugar will be detected, and, moreover, that the cataractous lenses of patients the subject of diabetes mellitus occasionally contain sugar. From the experimental standpoint, especially the researches of Mitchell and Deutschmann, it is known that the injection of large quantities of salt or syrup into the tissues of the lower animals may cause opacity of the lens, the result probably of the extraction of water from the lens and interference with its nutrition. We also have in evidence the occasional spontaneous disappearance of diabetic cataract, in some instances corresponding with a diminution of the amount of sugar in the urine. Knies thus summarizes the various theories which have been brought forward to explain the connection between diabetes and cataract.

It may result from: 1. A general marasmus. The objection to this hypothesis is that in very high grades of depraved nutrition occurring in diabetes quite frequently there is no cataract. 2. The abstraction of water from the lens by means of the sugar in the tissues, which, in fact, very frequently, if not as a rule, is found in the lens, and more often in the aqueous humor and the vitreous. If this were true, however, after a time all diabetes should suffer from cataract, which is not the case. Besides, as Leber has shown, both the opaque and the clear lens may contain sugar in diabetic patients, and Becker has described cases in which in one eye the cataractous lens contained sugar and in the other it did not. 3. Finally, is the theory that the sugar contained in the aqueous chamber undergoes a change into lactic acid, which in its turn causes the cataract. This theory has no foundation, inasmuch as the aqueous humor is alkaline, even though there be diabetic cataract, and, in the second place, the opacity does not begin in the anterior cortical portions of the lens.

Touching the pathology of this affection, and throwing some light upon the relationship between the disorders, Deutschmann[8] examined four cases of diabetic cataract, finding proliferation of the layer of pigment cells on the posterior surface of the iris, a condition which had previously been described by Becker. In the lens were vesicular cells (blasenzellen) and all the changes from normal nuclei to complete nuclear disintegration. Deutschmann concludes that the opacity in the lens is due to a necrotic tendency of the epithelial structures, just as the same tendency is shown by all epithelial tissues in this disease. If the epithelium is normal no pathological process of diffusion takes place, no matter if both vitreous and aqueous contain sugar, but when necrosis of the lenticular cells occurs abnormal diffusion currents are set up and produce opacity. Referring to these researches, and others like them, Knies points out that in certain cases the iris is more or less changed—sometimes atrophic, sometimes slightly inflamed—in other words, uveal tract inflammations may be present in diabetes. The development of cataract, then, belongs not so much to the presence of sugar, but is an intoxication symptom—a species of auto-infection.

The relationship between diabetes and the formation of cataract, which has been accepted for many years, has recently been questioned in a publication of Mauth-

4 "Des Cataractes syphilitiques." These de Bordeaux, 1884.
5 Wien. med. Wochenschr., 1877, p. 559.
6 Loc. cit.
7 Guy's Hospital Reports 1859, vol. i, p. 237.
8 Graefe's Archiv. xxxiii., Abth. 2, p. 229.

ner's.[1] His study includes a large number of cases seen in Carlsbad. An editorial published in the *Medical News*, March 18, 1893, reviews this paper and from it I extract the following quotation as pertinent to the subject: "In most of the cases in which defects of vision were found, these could be as readily attributed to concomitant conditions, such as age, impaired nutrition, and other intrinsic influences. The number of cases of diabetes mellitus in which cataract exists will, at best, be found to be exceedingly small. It is pointed out that the peripheral striation of the lens sometimes found in diabetes, and especially in the inferior median quadrant, is quite common, and becomes progressively more frequent in individuals that have passed the fiftieth year of life. Among the influences that might be considered as favorable to the development of cataract are: The displacement of water in the fluids and tissues of the body by the presence of sugar; a diminution in the resistance of the walls of the bloodvessels as a result of the pathological metabolism, of toxic substances that give rise to inflammation and degeneration; the marked marasmus; complicating or intercurrent affections. If the ocular changes were due to the loss of water, they should likewise occur in simple polyuria. It is more than doubtful that opacities of the lens result from the presence of sugar, for there is evidence that the lens normally contains sugar. The development of cataract in an elderly person whose urine contains sugar does not constitute sufficient ground on which to make glycosuria responsible for the loss of transparency of the lens, for it is known that in the large majority of cases of senile cataract the urine does not contain sugar. The conclusion is reached that the presence of sugar in the fluids of the eye does not lead to any disease of the organ of vision, and especially not to the development of cataract. In a small percentage of cases of diabetes mellitus, however, the excessive elimination of sugar and of water does lead to the development of cataract."

III. Local Diseases.

(*a*) *Diseases of the Heart and Atheroma of the Vessels.*—From time to time diseases of the heart and of the bloodvessels have been brought forward to explain the existence of cataract. One of the earliest communications on this subject is a report, by Furneaux Jordan,[2] on the relation of cataract to heart disease. Nineteen cases are reported: 2 under twenty years of age, 7 between forty and fifty, 5 between sixty and seventy, and 5 past the seventieth year. These patients suffered from various forms of organic cardiac lesion and had cataract. Other than this, no relationship was demonstrated; but, as will be noticed, the majority of the cases were at that time of life when cataract is likely to occur in the absence of constitutional disorder. The cases, however, are quoted for the reason that it was an attempt to gain some information in regard to the etiology of cataract, and, as has been observed in other cases, there is an occasional relationship indicating that vascular disturbances are in some way responsible for opacification in the lens. Romiée (*loc. cit.*) ascribes several cases of cataracta punctata to heart disease.

A more modern view of a somewhat analogous relationship is the theory of Michel, that circulatory disturbances, and particularly atheroma of the carotid, may be responsible for the formation of cataract. Michel[3] came to the conclusion that opacity in the lens substance was a symptom of a local or general disturbance, and that so-called senile cataract depended upon sclerotic changes in the walls of the carotid. He analyzed 53 cases: in 14 of them there was monocular cataract, with atheroma of the carotid on the same side; in 14 there was double cataract which was more developed and had begun earlier on the side of the greater atheroma; in 9 cases of double cataract these had developed simultaneously with a double carotid atheroma; and in 8 cases of cataract there was sclerotic change in the carotid, and on the same side the presence of a swelling in the thyroid gland, or goitre.

Other observations on the same subject have been brought forward, for example,

1 "Amblyopia Diabetica," Internationale klin. Rundschau, 1893, Nos. 6, 7, 9, 11, 16, 24, and 25. Abstract, Centralbl f. prakt. Augenheilk., August, 1893.

2 British and Foreign Medico-Chirurgical Review, 1857, vol. xix. p. 484.

3 "Ueber den Zusammenhang von ocularen Storungen mit Storungen im Circulationsgebiete des Carotis," Sitzungsber d. physik. med. Ges. zu Wursburg, 1881, Nr. 6. And "Das Verhalten des Auges bei Storungen im Circulationsgebiete der Carotis," Festschrift zu Ehren Prof. Horner's, 1881; S. 1. Abstract, Nagel's Jahresbericht, vol. xii. p. 323.

in the thesis of Karwat[1], which adds a series of cases confirming those already reported by Michel, viz., that there is a relationship between atheroma of the carotid and the formation of cataract.

On the other hand, Becker,[2] with the help of Adolf Weil, investigated 53 cataract cases, among whom disease of the carotid was evident in only 16 ; in 37 it was not present. Among the 16 were 6 persons with atheroma more developed on the side of the lens first affected ; in 10 cases this was not the sequence of events. Moreover, this was found only in individuals who had passed the fortieth year. In all four cases of one-sided cataract the condition of the circulation in general, and especially of the carotid, was normal.

(*b*) *Nephritis.*—Naturally, the various types of so-called Bright's disease, and the widespread lesions which they may produce throughout the body, have been brought into connection with the formation of cataract. Deutschmann,[3] after reporting 21 cases of lenticular opacity in which he had found albumin seven times, and six times established the presence of nephritis, called attention to the possibility of a connection between the two diseases. Still later, in 1881, the same observer[4] found among 53 cataract patients 9½ per cent. cases of Bright's disease, and again refers to the relationship between albuminuria and the development of lenticular opacities, quoting Becker, who had in a communication disputed his conclusions, and yet found from 2 to 18 per cent. of the cases suffering from albuminuria. In still a later communication Deutschmann[5] reports the examination of 230 patients with uncomplicated cataract, among whom 5 per cent. were undoubtedly nephritic, and 11.1 per cent. probably affected with Bright's disease.

This communication was followed by one from the pen of Landesberg,[6] who describes the examination of 376 patients with uncomplicated lenticular opacity, finding sugar alone in the urine of 3 of them, sugar and albumin in 2, and albumin in 44—therefore 327 with normal urinary analysis and 49 abnormal—and concludes very properly that albumin and cataract may be associated as a coincidence, but that the presence of albumin does not necessarily mean the existence of Bright's disease.

In 1886 Rothziegel[7] found albumin in more than half of his cases, and attributed this large percentage to the fact that he examined them at many intervals during the day. He describes 15 cases of chronic nephritis with cataract, and comments upon the arterial lesions which may be present, and particularly atheroma of the carotid.

Finally, I may refer to the researches in 1887 of Evetzky,[8] who, desiring to investigate the trustworthiness of Deutschmann's albuminuria theory, divided his methods into three portions: 1. He examined 200 cataract cases for albumin. Of these, 35 were under fifty and 165 older than fifty. In 38 he found albumin—that is, in 19 per cent. of the cases. In 16 cases the albumin was a constant feature, and in 9 per cent. there were albumin and tube casts, and these usually in cases under fifty years of age. 2. He examined 97 cases of chronic nephritis, 70 under fifty and 27 older, and found the following eye-complications: albuminuric retinitis, cataract, posterior synechia, opacities in the vitreous, detached retina and synchisis scintillans. Cataract, always incipient, was found in 8 cases, or 8.2 per cent., and 1 of these was an anterior polar cataract which had existed for many years, while 7 of the cases were in old people. 3. He examined 584 old people with the ophthalmoscope, and found 204, or 45.2 per cent., with cataracts, usually incipient. Of these there were 2.09 per cent., in the sixth decade, 43.75 per cent. in the seventh decade, 52.6 in the eighth decade, and 66.6 per cent. in the ninth decade. Their urine was examined, and in 59 cases, or 10.5 per cent., albumin was found, and in 1.6 per cent. tube casts. Of the cataract cases 10.5 per cent. showed albumin; of the non-cataractous cases 9.8 per cent. True nephritis was found among the cataractous patients in 0.8 per cent. of the cases, and 2.1 per cent. of the non-cataractous patients. Therefore, he concludes that

1 Beitrage zur Erkrankung des Auges bei Karotisatherom. Inaug. Diss., Wurzburg, 1893.
2 Zur Anatomie der gesunden und kranken Linse. Weisbaden, 1883, p. 184.
3 Graefe's Archiv, 1879, xxv., Abth., 4, p. 24.
4 Ibid., xxvii., Abth., 1, p. 315-317.
5 Ibid., 1883, xxix., 2.
6 Ibid., xxx., Abth. 4, p. 143.
7 Allg. Wien med. Zeitung, Nr. 30, 1886.
8 Archives d'Ophthalmologie, July and August, 1887.

albumin does not mean nephritis; that nephritis and cataract may combine; that in young nephritics there is no cataract, and in old ones not more usually than in those who are without the signs of Bright's disease.

Thus it will be seen that while it is of the utmost importance, both in determining the prognosis of the affection and also that of operative interference, to examine the urine of every cataract patient, and while albumin and sometimes tube casts may be found, no causal relation has been positively established between nephritis and cataract.

(*c*) *Nervous Diseases.*—We have already determined that zonular cataract, which has been found in association with rachitis, is more likely due to convulsions, or to local cramp in the ciliary muscle, than to the disease itself. In like manner, those examples which have been found in connection with other complaints, more particularly belonging to lesions of the nervous system, for example, epilepsy are explainable by the presence of convulsive disturbances. Thus, Logetschnikow[1] describes 15 cases between the ages of sixteen and thirty-seven, who suffered from general clonic convulsions and developed total cataract. Their vision had been good, with the exception of one case, before these nervous phenomena manifested themselves. He discusses the possibilities of other causes for cataract and practically eliminates them, and concludes that the development of cataract is in relationship not alone with the convulsive seizures, but with the nervous lesion which is the basis of the convulsive efforts.

Meningitis has been responsible for the formation of cataract in young individuals. Bock[2] has reported 5 cases between the ages of thirty-four and thirty-nine who suffered from cataract, underwent an operation, and secured good vision. He excluded other causes of lenticular opacity except the likelihood that the disease followed the meningitis from which they suffered. Examination of the eyegrounds seemed to show that two may have had optic neuritis, but none the less they did well after operation. There were no convulsions.

Sewill[3] reports an interesting case of orbicularis spasm on the right side of the face and the development of cataract. The spasm was caused by a carious tooth and ceased on its removal. He refers to trophic changes in connection with the trigeminal ganglion as a possible explanation of these phenomena.

(*d*) *Diseases of the Skin.*—Mooren, quoted by Norris, asserts that chronic skin eruptions may favor the development of cataract by causing creeping inflammatory processes within the eye, and Förster believes that it is not impossible that chronic skin affections may favor to the development of a depraved nutrition, which in its turn produces cataract by alterations in the nutrition of the lens.

Rothmund[4] describes an unnamed exanthem, the pathological anatomy of which was a chronic parenchymatous inflammation of the skin, the papillary layer and rete Malpighii being chiefly affected, which appeared in a number of children and was associated with the development of lenticular opacity. This began between the fourth and sixth years, although the saffikenction was manifested between the our th and sixth months. The cataract commenced in stripes, but quickly developed and became complete in several days. This skin affection was compared with vitiligo, keloid, and ichthyosis, but had sufficient individual peculiarities to separate it from each of them. No good explanation was given of the cause of the opacity, except, perhaps, that the chronic parenchymatous inflammation of the skin was associated with an analogous condition of the lens.

Nieden[5] has described the case of a girl, aged twenty-two years, who developed cataract rapidly, the opacity being preceded by a teleangiectatic swelling of the capillaries of the face. Referring to the well-known relation of diseases of the uveal tract to the development of cataract, and to the relation of atheroma to its production, he thinks the dilated capillaries may have been an indication of a vascular disturbance within the cranial cavity which was responsible for the passage of the lens into opacity.

1 Monatsbl. f. Augenheilk., Jahrgang x., 1872, p. 351.

2 Wien. med. Wochenschr., Nr. 39, 1889.

3 Brit. Med. Journ., May 10, 1884, p. 899.

4 Graefe's Archiv. f. Ophthalmologie, 1858, vol. xiv. p. 157.

5 Centralbl. f. prakt. Augenheilk, December, 1887, p. 358.

IV. TOXÆMIAS.

Although, perhaps, not belonging strictly to the list which I have discussed, it would seem, in closing, proper to refer to one or two forms of cataract which have developed, if not under the influence of, at least in association with, the action of certain drugs. Foremost among these are the observations which relate to the development of opacity of the crystalline lens in connection with ergotism, or, as it is often called, the formation of raphanic cataract.

Thus Meier[1] observed 23 cases of ergotism, 15 females and eight males. Their ages were between ten and sixty, the poisoning lasted from six weeks to three months, and the chief symptoms were cramps and convulsions. He attributed the disease either to the action of ergot on the ciliary nerves, or to the convulsive disorder. Numerous papers have appeared upon this subject, to which further reference is unnecessary, except to say that, as, for example, in those cases reported by Tepljaschin,[2] 27 in number, occurring during an epidemic of ergotism, and for the most part under thirty years of age, the development of the cataract was ascribed rather to the convulsive disorder than to any distinct action of the poison itself. Hence it seems proven that the lenticular opacity results from the violent general convulsions and not directly from the ergot.

Among other toxic agents that are known to cause cataract is naphthalin. Experimentally, cataract has been produced with this drug by feeding it to rabbits, but it should be mentioned that, in addition to the lenticular opacity, there are general disturbances as well as changes in the retina and vitreous. Other drugs and toxic agents have in a vague way been suggested as a possible cause of opacities in the crystalline lens, but it is likely that these relationships have existed in the minds of the patients rather than in reality, and before they can be accepted, direct experimentation, especially upon the lower animals, will be required.

Naturally the possible relationship between cataract and general disease has often been discussed, but, as may be seen from the cases quoted this evening, the conclusion reached by Becker,[3] that a connecting link between constitutional malladies and opacity of the crystalline lens has not been established, remains in a large measure unshaken. To quote again from this author: "The influence of the constitutional condition of the organism expresses itself relative to the lens, either that another portion of both eyes first becomes diseased and the pathological changes brought about in the vitreous through this means lead to the formation of cataract, or that the lymph of the body experiences changes, through which, without the evident intervention of other ocular lesions, lenticular opacity develops." None the less, as pointed out in the beginning of this paper, systematic examination of cases of general disease, especially frequent investigation of the transparent media, throw further light upon this subject, and is a research worthy of followers.

The evident influences of eye-strain and asthenopia in its widest sense, together with the changes which this produces in the ocular coats, particularly the choroid, referred to by Schoen and more recently elaborated by Risley, on the formation of cataract is well established. Possibly constitutional diseases permit this influence to be more strongly felt, and thus indirectly aid in the development of lenticular opacities, or, perhaps, a more direct influence can be established. Be this as it may, further critical evidence is needed.

1 Archiv. f. Ophthalmologie, 1862, viii, Abth. 2, 120–124.

2 St. Petersburg, med. Wochenschr., 1889, Nr. 3.

3 Loc. Cit.

The Reward of Wickedness.

"I never robbed a man but once," said the honest tramp, "and then I was starving. He would not give me a penny, and I couldn't stand the gnawings in my stomach any longer. So I knocked him down and went through his pockets. What kind of a haul did I make? Just one little bottle that read on the label: 'Pepsin; for the full feeling after eating.'" —*Judge.*

THE primordial lesion in neurasthenia, "according to Bouchard," is dilatation of the stomach. This condition he claims exists to a greater or less degree in all neurasthenics.

COMMUNICATIONS.

EXTERNAL URETHROTOMY FOLLOWED BY SEPTIC ARTHRITIS.*

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The case which I propose to present to you to-night is in truth one upon which an external urethrotomy has been performed, but the operation itself has been completely overshadowed by the complications that ensued. I lay it before you not to serve as a text for any discussion of septic arthritis, but simply as an example of the severe and unexpected results that sometimes follow an apparently simple and favorable operation. For many of the data I am indebted to Mr. Lovell, R. S. of the ward. John Henry, aged 21, was admitted to No. 2 on June 25, 1893, suffering from urethral stricture. He passed his urine with straining and in a very small stream. This he had noticed three months before, but it had grown progressively worse. As is frequently the case with negro subjects, he denied any previous venereal trouble. On June 27 a filiform was inserted with the intention of passing a Goulé sound. The whalebone was old and defective, and, slipping from the grasp of the assistant who held it was doubled upon itself by the sound and broke off in the urethra.

External urethrotomy was now done, the whalebone extracted (a portion of it was fortunately still in the urethra) and the whole canal was dilated with steel sounds. Considerable traumatism was inflicted upon the penile portion in this operation.

The patient was put to bed and in the evening his temperature was 101 deg. From that time till July 5 the temperature ranged between 99 and 100 deg., when on the morning of the 5th it rose to 103 deg. From that time till the 16th it remained very high but irregular, owing to the use of antipyretics. On the 8th the thermometer registered 105½ deg.; on the 11th it was again above 105 deg. These were the highest records. On July the 16th he was transferred to a medical ward, on the suspicion of typhoid fever.

From the day after operation he complained of pain in the urethra and perineum, but no sign of a phlegmon could be discovered and the urine was only slightly tinged with mucus. With the advent of the high fever came intense lumbar pain, with some tympanites and tenderness over abdomen.

He remained in the medical ward for thirteen days, during which there developed an arthritis of the left wrist, and of the right knee and elbow. His temperature now ranged between 99 and 102 deg., generally being about 100 deg. His condition was one of general sepsis. Abscesses formed and were opened on the shin below the inflamed knee, and in the axillæ. From the right elbow and knee fluid was removed with the aspirator, in which was found a considerable amount of pus. The joints were immobilized with plaster casts, and in the case of the knee an ice bag was kept on for three days, before the plaster was applied.

In addition to these serious joint troubles, on August 10 a profuse watery diarrhœa commenced and continued till the 23rd, when it was finally checked by the lead and opium pill, having been uninfluenced by mixtures of bismuth, salol and chalk. From August 23 the man began steadily to improve. The swollen joints subsided, temperature seldom rose above 99 deg., appetite returned, and on September 1 he got up and has since been able to sit up during the day.

Of course, during this time the urethra has been left to itself; at no time has the man been in a condition to stand the passage of a sound, but some urine passed by the meatus, and before long I hope to be able to pass an instrument and restore the canal. Throughout the case the treatment has been symptomatic. Fever was combated with quinine and phenacetine, and with sponging.

The joints were put at complete rest by means of immovable splints. In the case of the knee a considerable amount of fluid was withdrawn by the aspirator and the ice bag applied for several days.

While still weak and not entirely over the arthritis, the patient is rapidly improving, and we hope will yet recover entirely.

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ORLEANS PARISH MEDICAL SOCIETY.

Meeting October 14, 1893.

Dr. Martin read his paper on

LONG CONTINUED FEVERS IN LOUISIANA.

My desire this evening is to prompt a discussion on a subject which, though not entirely new to the society, is, I believe, most deserving of consideration. I have had to cope recently with a type of fever foreign to any represented in our text books. From older practitioners I learn that these slow fevers of Louisiana, which resist all forms of treatment, and which are sometimes more aggravated than benefited by quinine, are of recent origin in this State. With the many forms of malarial fever we are thoroughly conversant, though it is my belief that the prefix "malaria" is too often used to supply a want in the absence of a diagnosis. In my own brief experience I have known a case of abscess of the liver to have been diagnosed and treated for six weeks as one of malarial remittent fever. Also, a case of pelvic cellulitis, notwithstanding the local pain, was diagnosed as malaria. In such cases, however, a correct solution of the case is generally arrived at before any serious trouble arises. But an error of this kind in the diagnosis of typhoid fever would, at least in my hands, prove fatal. We should bear in mind that, notwithstanding the teachings of our professors, typhoid fever does exist in this community, and to such an extent that it is time for us to eradicate from our minds old prejudices so thoroughly instilled in past years, for there can no longer be a doubt of its existence, and to the extent that we should be prepared to meet it at any time.

Is it not possible that many of the so-called cases of typhomalaria are modified forms of typhoid? May not climatic influences moderate the diseases, for certain it is that few, if any, typical cases have ever originated in our city. Malarial and typhoid fevers are distinct forms and easily diagnosed, making the treatment clear. But another form of continued fever exists, so different in its origin, its symptoms and its cause from either of these two forms that I have deemed it my duty to introduce the subject here to-night and to ask the members of this society to give the matter their time and consideration. This fever, so I have observed, is usually ushered in without any premonitory symptoms. The patient usually complains of feeling dull; the tongue may or may not be coated; the bowels costive; loss of appetite; sometimes nausea and slight elevation of temperature; seldom any functional disturbance. The temperature will vary from 99 degrees to 103 degrees, and the fever will continue from three to nine weeks. Patients are not greatly exhausted by the fever and are sometimes able to keep about their work. One case which I had under treatment, a robust person, was never compelled to lie down during the day, but spent the time in a large arm-chair. The fever lasted ten weeks. In this case, I believe its long continuance was partly due to malnutrition. Nausea complicated the treatment, and the question of treatment became a serious problem, until I had recourse to raw eggs and sherry; this constituted the nourishment during the day, the patient taking as many as half a dozen eggs in twelve hours. At night I gave mulled milk, which proved a soothing and nutritious beverage. Through the entire course of her illness I was at a lost to detect any one symptom sufficiently marked to point to a diagnosis. If malarial, it was not typical in appearance.

For some time I was inclined to believe it septic, but a most careful examination of every organ in the body, repeated several times, failed to substantiate this belief. As regards treatment, I have employed every form known to science without success. Quinine is inert, and antipyretics give but temporary relief. The case will run its course and must be treated symptomatically. My method of managing these cases has always been purely symptomatic, not expectant—relieve pain,

regulate the bowels, reduce the temperature, tempt the appetite and trust to luck.

If there are any present whose misfortune it has been to meet with such cases, I trust the results have been more gratifying, and that they have settled upon a diagnosis and a formulated plan of treatment.

I have prepared to-night, to present for your consideration, a number of charts showing the course of the various forms of continued fevers rather than monopolize your time with a detailed account of these cases. I will now submit these charts, which I have borrowed from the New Orleans Sanitarium, believing they will prove of some interest.

DISCUSSION.

After Dr. Martin had read his paper he presented charts representing the three types of fevers of which he had spoken—malarial, typhoid, and the particular type of remittent fever of which he had just spoken, which he said some of his confreres of the country called "slow fever." After the charts had been examined by the gentlemen present Dr. Martin said that as the subject of typhoid fever had been brought up at the last meeting, he had with him a chart of a typhoid case, regarding which he did not think it amiss to say something. The patient had been brought from Lutcher, a saw-mill town some distance above New Orleans. Was taken sick ten days before being brought to the Charity Hospital, where he was received May 21, and the case diagnosed as remittent fever. On May 27th he was admitted to the sanitarium. Up to that time had been taking quinine, and did so after the case was diagnosed as typhoid fever. He became delirious on the 28th and remained so for ten days. Pulse was very rapid and there were marked sordes, a thing you do not often see in remittent fever. Bowels very loose, with bloody stools. The treatment was symptomatic. A little antifebrine was given in whiskey to reduce the temperature—given in simple powder it distressed the patient too much. Strychnine was given as a tonic—that was really the treatment all the way through—antipyretics and strychnine, and he was kept on a milk diet. I believe, too, some ten drops of hydrochloric acid were given three times a day. Hemorrhages were treated with injections of laudanum, which seemed to have a good effect.

Dr. Lowe (in the chair) referred to the importance of the matter and said he hoped every member of the society would have something to say on the subject, and called upon Dr. Sexton to open the discussion.

Dr. Sexton said: Dr. Martin has presented a very interesting subject at a very opportune time. The long continued fevers are on the increase in New Orleans, and every practitioner has more or less of such cases to deal with throughout the entire year. When a student at college I remember that Dr. Bemiss in discussing this subject taught us that two separate and distinct poisons or morbid processes might exist in the system at the same time, each one modifying the other in its clinical history, so as to make a hybrid disease which was neither clear-cut malaria nor the classical typhoid of the older authors. During my practice in Mississippi, as well as in New Orleans, I have had considerable to do with these long continued fevers or the so-called typho-malaria of Wood. I have always considered it a mixed poison of the malarial element, whatever that may be, plus some septic infection.

The majority of cases coming under my observation presented a mixed clinical history, the malarial element of every other day exacerbations, while the septic and enteric symptoms were overshadowed or masked by the more powerful malarial poison. In other cases just the reverse was true.

In my experience with disease I have noticed that real, clear-cut diagnosis or typical symptoms of typhoid are the exception and not the rule. In a considerable experience with typhoid fever, I hardly recall a single case in which all the symptoms of the older writers on typhoid fever are to be found. Either the tongue does not present the characteristic symptoms, or diarrhœa or petechial spots are absent.

May it not also be true that malaria may become modified by the hygenic surroundings and changed conditions of the development of our city? If we were all practical microcopists when such cases come under our care, before beginning the treatment we should examine the blood for Laveran's plasmoidum malarial bodies, which being found (if they are the real cause of malaria), would clearly indi-

cate an anti-malarial course of treatment, which would be quite different if we should find the Eberth's bacillus. But whether these microscopic changes or bacilli are the causes or the results of the disease is not clear, at least to some of us.

I have often been puzzled in trying to think out the etiological process of this disease. Investigators tell us that one case of typhoid fever must originate from another, that the dejecta and infected water play the principal part in the spread of typhoid fever, so just how to account for the typhoid condition in these long continued fevers having no connection whatever with other cases of fever has been very puzzling to me. Not more so, however, than the resistance of these fevers to the action of quinine, though they possessed a distinctive intermittent clinical history—better one day and worse the next. That the fever has a malarial element in it is proven by the fact that it is most prevalent in malarial districts with every-other-day exacerbations. I have always considered it a non-contagious disease, having seen numerous cases where only one member of a large family has been affected with it. In its morbid anatomy it partakes both of the nature of typhoid and malarial fever. In substantiation of the fact that it is malarial fever, plus some other septic infection, I will call the attention of the society to the fact that it is most frequently found where such unhygienic conditions as over-crowding, bad ventilation, sewer gas, bad food and fruits from the market are used. In our city practice, perhaps, sewer gas more often represents the plus element in the etiology of the fever than any other of the causes mentioned.

With regard to its treatment I have usually met symptoms as they arose. Constipation in the beginning of the fever is the rule; to combat this I give from two and one-half to five grains each of calomel and soda at bedtime, providing the patient has never been salivated. In this event I use phosphate of soda, cascara sagrada or some vegetable pill. Later on in the disease I am more cautious about the use of purgatives, and have found good results by flushing out the bowels with antiseptic douches. Pyrexia has to be combatted, and I have usually accomplished this by sponging with tepid or cold water, rolling in wet pack and giving freely of cold water both by mouth and rectum, if agreeable to the patient. When the fever is high I usually keep the head enveloped in ice towels. An admirable diaphoretic mixture is made up of tincture of aconite, spirits of nitre and syrup of squills. More recent remedies for pyrexia belong to the coal tar group, one of which is about as efficacious as the other. I only give such remedies when the temperature is high, usually combining them with a toddy, and not repeating very often.

For the tonic effect of the quinine I usually give three capsules daily, combined with acetanalide or phenacetine to prevent disagreeable head symptoms and to meet the neuralgic element in the disease. I place more dependence on the sponging and cold baths, however, than any internal medication.

Large doses of quinine, while they may act as an antipyretic, will not abort the fever, and are damaging to the nervous system, hence should not be tried. As an intestinal antiseptic I use the emulsions of turpentine with salol or salicylate of bismuth; camphorated tincture of opium is added if there is exhausting diarrhœa. Internal hemorrhage are best controlled by some preparation of opium, and the ice bag. I have had good results from phospho-muriate of quinine compounded with arsenic, as a general tonic, repeated four or five times daily.

Dieting is very important, and should be confined to milk, broths, soups and gruel, nourishing in quality, small in quantity, often repeated. Under this plan of treatment I had perhaps a mortality of about 4 per cent. in the treatment of a large number of cases.

DR. DUPAQUIER: It is much to be regretted that the discussion is based on mere conjectures, as we have no record of investigations on the bacteriology and anatomo-pathology of these fevers, the only positive means of determining their nature. But think of the technical difficulties attending these researches. The clinical, like the pathological phase, is undetermined.

The long-continued fever of Louisiana has no definite type; it appears to be *sui generis*.

If it is typhoid, it is very much disfigured, and to make out the diagnosis of that erratic typhoid, I think that the nervous symptoms are of great help (see *Bull.*

de l'Academie de Med., Paris, 5 Sept., 1893, and *Gaz. Hebdom.*, Sept. 30., 1893.)

If it is malaria, it is again a very modified form, as it resists quinine.

Probably a secondary infection, due to gastro-enteric ptomaines, alters the character of the malarial fever, like secondary infection due to the streptococcus alters la grippe and creates the typhoid form of la grippe (see *Bull Soc. de Medicine*, Paris 21, Juillet, 1893). A sure thing is that the influence of climate upon disease is a strong factor (see Dutroleau and Laveran), and most probably in our climate both the universal typhoid and malarial poisons exhibit themselves under the peculiar forms of fevers now under discussion.

DR. CHAISSAIGNAC: I wish first, when it comes to a question of fact, to record my experience in rather a different way from that of Dr. Sexton. I have very frequently seen here in New Orleans typical cases of intermittent fever, either of the quotidian, the tertian, or even the quatran type. I have seen them very clear cut, and in people who had not been out of the city at all; who had marked chill, and had it come back the next day, or the day after, at the same hour. Again neither of these cases has any connection with the other form of the fever of which the doctor states it is his experience that it occurs where the hygienic surroundings are poor and the food bad. I have seen these cases in some of the best families in the city—people who live well, who are cleanly, and whose houses are good and well ventilated and not troubled by any sewage.

Now when it comes to the discussion of this long continued fever, I think we want to decide first what we want to call typhoid fever. Many of us have seen cases that had been recognized as only simple continued fevers, so called, as far as the symptoms were concerned, including the range of the temperature, and having nothing of all typical of typhoid fever, when the patient died, as in some cases I have in mind at the Charity Hospital, and a post mortem examination was made, revealed what we are taught to consider the characteristic lesion of typhoid fever, as far as Peyer's patches are concerned. So we have to decide whether this condition of Peyer's patches necessarily means that typhoid fever has been at work in the system. The two things that we have to determine, then, are (1) what we want to call typhoid fever; and (2) whether we can call typhoid fever only what is put down in the books.

This is why at our preceding discussion I used the term "classical typhoid" fever. Certainly, we have very little of that here, and it is certain also that these fevers we have under discussion are not that, whatever else you choose to call them. If they ever turn out to be due to the same poison as a regular case of typhoid fever, and that poison modified in some way or other, I can not say. They certainly are not the classical form of typhoid fever. We must determine, then, whether we are to consider as typhoid fever every case that shows the characteristic affection of Peyer's patches, as revealed in post-mortem examination; or whether we can call typhoid fever only those cases which in life present what we are taught to consider the characteristic symptoms. If we are to be guided entirely by the nervous symptoms, as it is stated they do in some parts of the world, we would have to exclude the vast majority of these cases at once from consideration. That is one thing very striking, that no matter how high the temperature goes, no matter how delirious the patient may get, they do not experience the typical symptoms of typhoid fever. This is one of the differences experienced; and we also do not have coma vigilis, the murmurings and gurglings, nor the typical bloody stools that we have in typhoid fever; so if it were not for that one point, where the lesion of Peyer's patches has been detected at post mortem, I would state unhesitatingly that we could not consider such a case to be typhoid fever, because the run of the temperature is different, the character of the stools different, and the symptoms, so far as the nervous system is concerned, are different, therefore, if it were not for that one point we could exclude it altogether.

When it comes to treatment of this fever, whatever you choose to call it—long continued, remittent, or anything you please—I believe it is treated very easily, and with very little medication if attention is given to the feeding of the patient. By feeding I do not mean crowding food upon him, but eliminating the indigestible from his diet and allowing him only the

liquid or easily assimilated articles. Reduce the temperature by means of baths as well as antipyretics. Under such treatment I believe a large majority of such cases will get well.

DR. BRUNS: I have no experience whatever as a clinician on these subjects, but wish to say a few words as briefly and as rapidly as possible to emphasize the difficulties of the pathological side of the question from the standpoint of a microscopist.

In the first place, I think we may say we have typhoid fever here in a very much modified form, but whatever we have, whether we are able to detect the classical symptoms or not, we must not confuse ourselves and suppose that typhoid fever of the classical type does not arise elsewhere. It is very common in all the Northeastern Atlantic States, where the country is mountainous and hilly. A clinical diagnosis seems to me the simplest way of determi ing the character of such cases, but we have already heard the difficulties of reaching a correct conclusion. It has been stated that the examination of the blood for the germ of typhoid fever or the plasmodium of malaria is the better way—the exact way. I believe the result are just as uncertain, and they are far more difficult to arrive at. In the first place the germ is very small. I have followed various methods with all the care that I could, and have found different and very conflicting appearances in the specimens of blood examined, and have never satisfied myself that I have seen the crescents of plasmodia, so that in the hands of one who has not special skill and some experience in these things it is not an easy matter to take a specimen of blood and say this is from a typhoid or malarial patient. It is extremely difficult to get a specimen from a patient who has not already been taking quinine, and all the authorities lay down the rule that it is no use to examine the blood if a patient has been taking quinine.

Now as to tyhoid fever cases: when I was a mere student in Philadelphia, I assisted Dr. Meyers of Jefferson Medical College, in making examinations of Peyer's patches in diseases other than typhoid fever, and we found in cases other than typhoid fever the swelling and lesion of Peyer's patches, which seemed to be exactly identical with the characteristic lesion occurring in typhoid fever—as far as we could judge it was the same. I have even seen that in a case of measles in a young child. So the mere finding of Peyer's patches, swollen and showing the usual lesion, I do not think is at all an emphatic diagnostic point. There remains therefore only the cultivation of the typhoid bacillus and its recognition under the microscope—a long and very difficult process, so that from the standpoint of a practical microscopist the difficulty of arriving at a true and logical conclusion is as great as it is with the practical clinician.

To conclude, and simply to throw out a hint, it seems to me a very weak place in the plasmodium theory, or the plasmodium fact, as already held, that in countries like this, where malaria is very rife, we see certain forms of malaria which certainly do not yield to quinine, and where, in fact, those who have most experience seem to think the administration of quinine freely rather does the patient harm than good. I have had no experience of that myself, but it seemed be to the opinion, of those practitioners whom I have heard talk on malarial hæmaturia. I must say that if the plasmodium is the organism that produces malaria, I can not see why quinine should not be administered as in other cases and then ought to do good.

DR. MATAS: This is a very timely topic with us, and although I have not had the pleasure of hearing Dr. Martin's paper, I am glad he has brought the subject up, because it permits me to supplement a paper I contributed to the State Medical Society in 1885 on the subject of "The Long Continued Fevers of Louisiana that Resist Quinine."

Without having heard the doctor's paper, I believe the fever he describes is precisely the same that I brought before the society at that time. As you see, we have already started by calling it simply "long continued fevers that resist quinine." Dr. Martin has called it simply long continued fever, and I believe almost every one is undecided as to giving this fever a specific, distinctive name, which fact is explained in large measure by the uncertainty of our etiological views on the matter.

However, as I stated, I desire to supplement my paper of 1885, because I wish

to correct the impressions conveyed, at least to correct the opinions I held at that time. In that paper I first called attention to the great clinical differences that exist between this fever and the usual typhus or typhoid types, and that they certainly were not the typical forms of malarial and typhoid fever as they are recognized throughout the world. In addition to this I called attention to the fact that these fevers were characterized by their absolute intractibility to quinine. That is one of their chief and essential diagnostic and therapeutic features. Another point I brought out was that this fever was lacking in the essential characteristic, particularly of the typhoid state, meaning by that the absence of the typical thermometrical phenomena, the absence of abdominal symptoms as a rule; the absence of the so-called characteristic eruption and the absence of anæmic symptoms which characterize the typhoid state.

To continue with the points brought out in that paper: I had satisfied myself that it was the same fever described by Dr. Guiteras as occurring particularly in Tampa and Key West. He had become thoroughly familiar with the symptomatology of typhoid fever as found in Pennsylvania and other Northern States, and when he came to the tropics and was confronted with this fever he was very much nonplussed, being unable to recognize it as any type with which he was familiar—not at all the type he had considered typhoid in Philadelphia and other Northern cities. After long observations of the fever he came to the conclusion it was a simple thermal fever, as he termed it, that occurred in the tropics, and was no more than the result of exhaustion of the heat-regulating apparatus, brought on by the long protracted heat of those latitudes. He considered the essential feature of the disease simply heat disturbance; it was a simple fever, that was all. There was no other manifestation of the disturbance—a simple febrile action, with no bowel symptoms, and nothing at all that might call the attention to the condition of the patient except the one fact of the fever. Consequently, he called it a simple, continued, thermic fever, the result of heat disturbance.

Well, I thought this we have here was precisely the same fever, and as far as clinical symptoms are concerned, it is the same as that described by Guiteras.

Now comes the differences. Since 1885 my field of observation has been greatly enlarged, and I have seen a great deal more of this fever. It may be because the number of my patients has increased—at any rate I have seen a great many more cases, which has given me the impression that this fever is increasing in the community. I believe this is also the impression of a great many of my fellow-practitioners. I certainly am called to treat a great many more cases every year, especially in the summer months. I think also that this fever is assuming a more grave character and demands our most careful attention, and that we should come to some conclusion as to its nature and etiology.

My observations have made me change entirely the views I held in 1885, and it is proper that I state the reasons therefor.

In the first place, this fever occurs in the winter as well as summer. That is something I had not observed, except in two cases, when I prepared that paper. There is no heat then, and there should be no disturbance of the heat-regulating apparatus. I have seen such cases long after the heated season was over.

In the second place, this fever does present at times, I agree with Dr. Chassaignac, the characteristics of typhoid fever—there seems to be two types, one typhoidal and the other non-typhoidal. I can cite at least a half dozen cases occuring in the last twelve months in which the typical typhoidal phenomena have presented themselves side by side with the non-typhoidal form, one patient even lying in the same house with another—that is, one with the simple form and one with the typhoidal. One case presenting the usual diarrhœal condition, and the other without diarrhœa. Both running a course of four or five weeks, but one patient taking his own medicine, reading books and newspapers, and doing everything a typhoid patient is expected not to do, while by his side would be a brother, or perhaps a sister, presenting many of the characteristic symptoms of typhoid fever, including the internal troubles, and finally dying of perforation of the bowels.

Thirdly, I have noticed that there have been groups of cases, showing that there is an infection. I have seen three and four cases in a house in certain districts.

I have in mind now three such cases where there were a series of cases. No later than last week I got through with a family in which there were four cases, beginning with a little child, who had fever five weeks, being followed by a little sister, then by a little brotner, all presenting the typical manifestations of this disease. I very soon came to the conclusion that there was one cause for all this fever, and have now fully decided in my own mind that this fever is truly typhoid fever—that it is a type of typhoid fever—surely there is no doubt about that. I admit that in the majority of cases it does not present the classical features of typhoid fever, but it does in a number sufficient to prove my position I think. Some of the cases are typhoid just as classical as we read of in the old authors.

Now, if this is typhoid, our sanitarians must investigate the question of means of prevention. Guiteras declared that he did not believe there was typhoid fever in Tampa, and we all know the opinion of Dr. Faget one of the ablest of the older physicians in the city, who held that he had never seen it and did not believe it existed here, that all typhoid cases were imported cases, etc. Guiteras believed it was impossible in Tampa and Key West because the people drank only pure rain water—cistern water, the same as we do here. But our views of typhoid fever have entirely changed. The days of Murchison I think are over, and we are not to believe any more that the existence of typhoid germs depends entirely upon sewerage or drainage. If we admit the bacillary origin of typhoid fever, we must admit other ways of propagation. I think typhoid is spread by many other ways than by water. It is a subject worthy of investigation from a purely sanitary standpoint, and is becoming more and more a serious problem in the mortality record of the city.

The matter of the identification of this fever with typhoid fever, and the difficulties of recognizing its etiology from a pathological standpoint, have been brought up, and the difficulty of identifying the disease by means of the microscope has been well established by Dr. Bruns. I think it is a subject that deserves thorough sifting from a clinical standpoint alone. Although we have nothing to substantiate the character of this fever from a clinical standpoint, I believe it is typhoid fever. But we want a bacteriological diagnosis of this fever, and I think we should formally commission some of our members to take the matter in hand and give us an exhaustive report. It is a sad commentary upon New Orleans, the largest metropolis in the South, situate in the very heart of the malarial country, in the midst of this almost epidemic fever, that we are not able to give some kind of bacteriological information on the subject. We see the work that has been done by the Italians in this direction in the last decade, done in France and Algeria, and even in Texas, and yet we have nothing to say on the matter—we who really ought to be the beacon lights in such investigations. I really hope the matter will be taken up seriously, and that we will entirely efface the bad impressions created by our apparent apathy to a subject of such importance, by a good report in the near future. And I hope particularly that that report may emanate from this society.

But to return to the subject. I think we have sufficient facts to establish this fever, from a merely clinical standpoint, and that the malaria we call "the long continued fever that resists quinine" is not malaria at all. At this point I would mention that Dr. J. J. Kinyoun, of the Marine Hospital Service, made some excellent investigations a couple of years ago upon the intestinal discharges. According to his statement he found, beside the bacillus of typhoid fever, the plasmodium of malaria, both micro-organisms being found together, so he said he had been able to confirm the position taken years ago, that two poisons could exist and thrive in the human organism at the same time. While I have great respect for the ability of Dr. Kinyoun, I am not sure that he may not have been mistaken—especially when you consider the acknowledged great difficulties of the identification of the bacillus, I am inclined yet to doubt, I will not say the correctness of his observations, but at least his conclusions.

I think the treatment is the simplest part of the problem. In that I coincide with the previous speakers, excepting that there are cases which will tax all our resources, therapeutic as well as medicinal. One very important thing we have to a great extent neglected in the application of the treatment of Brown in our typhoid

cases is cold bathing. I know it is not a treatment at all in favor in the community, and that with certain people, if you mention bathing, it means a change of physicians. Water is something that is held in perfect horror in the treatment of fevers. This I think is the result of the old treatment of the French nurses in yellow fever cases. The sweating process became so much in vogue that it is hard to dislodge it. It is our province to introduce this method, which, properly applied, is so beneficial. It is one of our most valued resources, but unfortunately too often neglected. The treatment by antipyretics has been a very favorite treatment. These remedies were rather new in 1885, when I referred to them in my paper. I got them as soon as they came out, and remember specially importing antipyrin for a special case. The rapidity with which these anti-thermic coal tar products will reduce temperature is something wonderful, and they have become thoroughly essential. But cold bathing is the only agent that will control pyrexia with safety, and I believe that the rules of Brown should be carefully followed in its application. We must know how to apply it, and must have intelligent nurses as aids. Intelligent nursing is really of the utmost importance in the treatment of these long fevers. I have seen a bath keep down temperature for three or four hours. A very interesting illustration occurred not very far from here, where a bath always kept the fever down for four or five hours at a time. It was applied with great care and precision, a thermometer being used always with the water as well as the patient. Our inability to always control our nurses is one of the great troubles in the application of this method; but we should not forget its utility and the necessity for forcing it upon the community in spite of old traditions to the contrary.

I have little else I might say, except that we all have a great deal to do with these long continued fevers, and that we all know better how to deal with them than how to settle their etiology.

Dr. BLOCH: This paper has been so fully discussed by the gentlemen who have just spoken, I feel almost anything I can say would be superfluous. I have been very much interested, having had a number of such cases under my personal observation—some outside, but mostly in the Charity Hospital. My efforts to cure them with drugs have been peculiarly fruitless.

Dr. Forcheimer, of Cincinnati, in his very excellent article in Keating's Encyclopedia of Diseases of Children, related how the excavation of a certain street to lay a sewer pipe caused an epidemic of fever all along that street. They called it typho-malaria. It was not malarial fever, for quinine had no effect upon it whatever; it did not yield. It was not typhoid, because there was no source of infection. However, if what Dr. Matas has said is correct, and I believe it is, it was typhoid fever of a modified type, as our experience shows that typhoid can enter the system through some other medium than the water; this must have been something of that sort. Among the many cases I have had of this so-called hybrid fever, I do not believe there has been one of real typhoid fever—not one with sordes on the teeth, with delirium, diarrhœa; not one which quinine has controlled; the only benefit derived was from small doses of quinine and antifebrine, given every two or three hours, which kept down the fever to some extent.

At the last meeting of our society I spoke of three cases in which typhoid lesions were found, the patient presenting no symptoms of typhoid fever. To-night I present the chart of a man who came to the hospital after being sick ten days, presenting at the time the typical symptoms of typhoid fever. The man died. My student held the post mortem for me, reporting no lesion of the intestines.

I have received great benefit from the cold bath, which I have always found acceptable to the patient if properly given; not only has the temperature been reduced, but it has always produced a quieting effect, promoting rest and sleep. I attach great importance to the diet, and will not allow anything of a solid nature to go into the alimentary canal.

DR. PARHAM: It would be difficult for me now to say anything that has not already been said. I was very much impressed with the importance of some of the cases, or groups of cases, which Dr. Matas reported. It seems to me that if we could collect data regarding a sufficient number of such groups it would settle the question for us—as to the nature of this fever. Certainly such a thing as typhoid

fever exists. Anybody who has been East and seen twelve to fifteen people in one ward of one hospital sick, with the same symptoms, must be convinced there is such a thing as typhoid fever. I must say that I have not seen here what I consider a typical case of typhoid except, possibly, in the Charity Hospital. In my private practice I have not met a typical case of typhoid, though I am firmly convinced that most of these cases denominated continued malarial fever were really typhoid fever of a modified form.

It seems to me that if this society could have data taken of all cases of these long continued fevers that resist quinine for say a year, and at the end of that time have a committee take charge of those reports and draw some conclusions, I believe the results would be of great value. The case of which Dr. Matas speaks, where there was a case of typical typhoid fever, and others alongside of what he terms simple fever—or what Dr. Guiteras called simple thermic fever—where the fever was the only symptom, that is a very remarkable observation, and one which I have never been able to make myself. It seems to me that if Dr. Matas would collect these facts and report them to this society, and then all of us follow suit, reporting all our cases of continued fever, say for a year, that the results would at least be very interesting; and then get all possible data from the records of the Charity Hospital regarding autopsies on such cases. I believe we would in this way get some very valuable data. I think a committee should be appointed to undertake this work, and that every member of this society, especially those who attend the most regularly, should oblige himself to report every case of continued fever which resists the action of quinine.

Dr. Scheppegrell: As Dr. Matas is convinced that this fever is identical with typhoid fever, it may not be uninteresting for me to mention some facts regarding a small epidemic with which I was connected some years ago, when I was practicing in Charleston, South Carolina. I was physician for a phosphate company, which operated about five miles from Charleston, and had a settlement of its own, employing between 300 and 500 workmen. I was called one day to see a case of fever, which in a few days developed all the seeming symptoms of typhoid fever—nose bleeding, diarrhœa, tympanities, etc. About a week later I had two more cases, and then concluded that as all these workmen procured their water from one well (there was an artesian well on one side of the works and a common well about the middle of the settlement, from which most of the workmen drew their water), I concluded that his well was the source of infection, as it received surface water. I had it closed, the pump removed; but about a week later I had five more cases, and a careful investigation showed that, although the pump had been removed, some of the families of the workmen had been taking water from the well, intended for washing purposes only, but the men would come in hot and would drink from the bucket containing this well water. I reported the matter to the president of the company, who had the well filled up and another well dug on the upper part of the hill, and we had no more cases of fever. There were eleven cases in all. Three cases died of intestinal hemorrhage, and the autopsy showed lesion of Peyer's patches as well as hemorrhage.

Dr. Theard: I would have preferred very much to remain silent. The younger members of the profession in these gatherings can spend their time much more profitably by being all ears than by being all tongue—by listening to the words of members of maturer years and wider experience; but since all must contribute their mite, I will have to do as the others do. While the case of which I speak is not directly in line with the discussion, it is one that nonplussed me at the time, and one I think is remarkable so far as heat record is concerned. I diagnosed it and sent in a death certificate to the Board of Health with a high-sounding name attached, but even now I am not entirely satisfied that I knew what was the matter. It might have been something else, but if so I could not detect it.

I was called at night to see a young Italian, aged 24 years, who had been married only thirty-six hours. He had fever at 1 o'clock and went to Dr. Fourguette at 2 o'clock, who prescribed a remedy for fever. At midnight the patient had high fever and again sent for Dr. Fourguette, but he was not in the office and I was called. I placed the thermometer in the axilla, and on looking at it thought

surely the column had dropped—it registered 111 deg. I knocked it down and again it went up to 111.° Again I knocked it down, and again it went up to 111.° Again I knocked the column down, washed it, and tried it in my own mouth, where it showed normal. Placed again in the axilla it registered 111.° This was conclusive. As there was vomiting and the pupils seemed larger than normal, I suspected foul play, as the man was an Italian and married only thirty-six hours, but I could not detect any sign of poison. I gave injections of quinine and antipyrin, which brought the fever down to 103 deg. In the course of four hours the patient was dead. As I said I sent in a certificate with a high-sounding term attached, but even now I am perfectly nonplussed. I can think of no condition that might have occasioned such a fever. The thermometer was proven correct, for I tried it next day with another. I tried it with two physician's thermometers. The heat was such that the rise was sensible to the touch. I should much like to know if any others have experienced cases showing such abnormal febrile symptoms, and to what they attributed them.

DR. BRUNS: I would ask Dr. Matas if he has ever seen a malarial temperature of 111 deg. I believe that temperatures of that range can only be of nervous origin.

DR. THEARD: That was the diagnosis sent in. I had to give some diagnosis, but I have been nonplussed and worried over the case ever since. Whatever the cause of the fever I believe the patient would have died. I should like to hear what other disease might have brought on such a condition. I supposed such a high fever might have been experienced in erysipelas—I have heard of it in no other disease.

DR. MATAS: The highest temperatures have always been associated with some heat stroke—especially if the subject has been in the habit of taking intoxicants.

DR. CHASSAIGNAC: I remember distinctly a case where a man recovered after remaining comatose for forty-eight hours, and where the temperature registered was 110¾ degrees. It was a year when we had more cases than in any year I remember. It was during my student days. We had a large number of cases, many of them with exceedingly high temperatures. I think this was the highest I saw registered.

DR. PARHAM: I remember cases in the Charity Hospital, during the yellow fever epidemic of 1878, where the temperature went up to 108, 110 and 113.° A remarkable thing was that the temperature continued to go up after death.

DR. MARTIN: Possibly you will recall a similar case, where a party broke his neck at West End. We brought him in, and about six hours afterward the temperature in the axilla was 108 degrees. The autopsy proved the diagnosis.

DR. THEARD: In my case there were none of these symptoms present, especially as the case was at night, and my recollection is that the night was cool.

DR. KOHNKE: I can remember clinical cases where I was rather inclined to consider typhoid fever, but feared to entertain the opinion against what I thought to be the prevalent judgment upon the question. After a thorough investigation, I believe we will call many cases typhoid boldly that we would have feared to call typhoid before. They have not changed any, but as in cases of grip at the beginning of the grip season, we hesitate to call it grip, but when we see our contemporaries gradually coming down to grip we fall in, and then call grip what we perhaps thought was grip before, but feared to be too soon.

Dr. Martin then referred to the groups of cases spoken of by Dr. Matas, some presenting the typhoidal type of fever and some only the so-called simple thermic fever, and in some cases both forms occurring side by side, and mentioned a case that had come under his own observation, where a man had been sick with the simple form, and had for a part of the time conducted his business as usual, while in the same bed lay his wife who had an unmistakable case of typhoid fever, all the symptoms being present except the eruption.

Speaking of the giving of baths, the doctor said he did not think any objection would be made to bathing if administered in the way it is given at the Sanitarium. It is really a wet pack. The patient is but on a bed that can be handled easily, and the head is lifted two or three inches. Put the patient on a rubber sheet, and have the water poured on the top at any temperature required. It is generally sprinkled on. The patient does not necessarily have to be taken out of bed. This will bring down the temperature to a marked degree.

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SATURDAY, DECEMBER 2, 1893.

EDITORIAL.

ST. ANTHONY—UP TO DATE.

Ancient chronicles inform us that the venerable and original

"St. Anthony sat on a lowly stool,
And a book was in his hand;
Never his eyes from its page he took,
Either to right or left to look:
But with steadfast soul, as was his rule,
The holy page he scanned.

"We will woo," said the imp, "St. Anthony's eyes
Off from his holy book;
We will go to him all in strange disguise,
And tease him with laughter, whoops and cries,
That he upon us may look.

"The Devil was in the best humor that day
That ever his highness was in:
And that's why he sent out his imps to play;
And furnished them torches to light their way,
Nor stinted them incense to burn as they may—
Sulphur, and pitch, and rosin.

"So they came to the Saint in a motley crew—
A heterogeneous rout:
There were imps of every shape and hue,
And some looked black, and some looked blue,
And they passed and varied before the view,
And twisted themselves about:
And had they exhibited thus to you,
I think you'd have felt in a bit of a stew—
Or so should myself no doubt.

* * * * * * *

"But the good St. Anthony kept his eyes
Fixed on the holy book;
From it they did not sink nor rise;
Nor sighs nor laughter, shouts nor cries,
Could win away his look.

* * * * * * *

"Last came an imp—how unlike the rest!—
A beautiful female form;"

Well! this last effort proved successful, but his Satanic majesty evidently made a miscalculation, for he woke up the good saint so thoroughly that he grasped the situation, experimented with the apples of Sodom, and, eventually clearing his mouth of ashes, waged unceasing war against the entire impish crew. So well have his successors carried on his campaign that the Practical Joker with horns, is compelled to use every means of offense and defense furnished by the greatest engine of civilization—the printing press, and the present incumbent of the saintship, surnamed Comstock, is constantly and from all sides assailed as an 'imbecile,' 'crank,' 'libertine,' 'fool,' 'monster,' etc., etc.; is used to point the moral of that hoary aphorism "to the pure all things are pure;" is proved the 'lascivious incarnation of obscenity;' is pitied 'as one whose object in life is to rake up smut,

and has 'his own morality judged by the amount of supposed immorality that a prurient fancy can succeed in ferreting out.' We tender this canonized unfortunate the assurance of our most distinguished consideration.

The experience and judgment of the Anthony Saints is thus summed up:

"There are many devils who walk this world,
Devils large, and devils small;
Devils so meagre, and devils so stout;
Devils with horns, and devils without;
Sly devils that go with their tails upcurled;
Bold devils that carry them quite unfurled;
Meek devils, and devils that brawl;
Serious devils, and laughing devils;
Imps for churches, and imps for revels;
Devils uncouth, and devils polite;
Devils black, and devils white;
Devils foolish, and devils wise;
But a *Woman, photoed without disguise*
Is the worst devil of all."
(*Altered for the benefit of the present saint.*)

The St. Anthony principles are indorsed by all civilized governments, and are embodied in the laws operating for the suppression of vice and crime. The propriety of such laws, appealing to the common-sense of individual citizens, is unquestioned so long as the interests of the individual are not in conflict with the law. The Federal law of the United States decrees, in effect, that no obscene literature or cuts displaying those parts of the body which it is immodest to expose to view, shall be admitted into the mails, the law presuming that such literature and pictures are sent out for immoral purposes or from mercenary motives which utterly ignore all considerations of public morality. The decision as to what is or is not fit to be admitted into the mails is left to the Postmaster-General and by him to the Inspector of mails.

Inspector of Mails is the official title of the present occupant of St. Anthony's stool. This gentleman has at divers times, in divers places and by divers means made himself to be disliked by certain of the scribes and pharisees—hypocrites, because he has so far departed from the rule of the founder of the stool that he can by no means be induced or compelled to rivet his eyes on the holy page, but persists in scanning unholy pages in search of tracks of the imps who occasioned his predecessor so much trouble.

The REPORTER has not been in sympathy with all the official acts of this gentleman, but it recognizes his great moral courage, his conscientious performance of his duty in the face of stupendous obstructions, that the mistakes he has made have generally been on the safe side, and it measures his efficiency by the amount of obloquy and abuse he has sustained.

In the present instance the REPORTER is in entire sympathy with the U. S. Inspector of Mails. The situation, as given in a circular letter by the company involved, may be summed up as follows: The company manufacturing appliances for the use of physicians issued a catalogue, parts of which were copyrighted, advertising their appliances and giving a number of cuts in illustration of the uses of their articles. Among these cuts were some from photographs of nude models, taken in different postures and undoubtedly within the limits prohibited by law. These catalogues were widely circulated through the mails—professedly sent only to physicians. The manager of the company has been arrested by the Inspector, charged with the violation of the postal laws, on the ground that these laws cover "any print exposing part or all the genital organs of either male or female," and that all prints, books, pamphlets or what not, containing such illustrations, are in violation of the postal laws, no matter for what purpose intended or used.

From this action of the Inspector of Mails, the company, alert to the advertising value of the situation, generalizes to such an extent as to make the Inspector's decision cover all medical literature what-

soever, containing illustrations that would come under the law quoted, and making it appear that the intention was to enforce the law without discrimination. Thus obscuring the point at issue by urging an impending catastrophy to medical literature. This circular was sent to the medical journals in hope of creating sympathy —and possibly of securing a unique advertisement that money could not buy.

The REPORTER believes the action of the Inspector of Mails right. The grounds for action were undeniable. The illustrations are not only objectionable but utterly useless so far as giving physicians any needed information, while it would be an insult to ordinary intelligence to allow a patent advertising sheet to be classed as literature of any kind, much less to claim protection as medical literature or as being of any value to medical men. Furthermore, there is no assurance that this advertising medium goes to physicians only. There is no reason why the law should not here be applied as it would be if the same illustrations were used in the advertisement of any other business.

The assumption that this advertising sheet could be classified as medical literature would be too absurd to notice were it not for the fact that these and kindred illustrations have appeared in sundry journals of more or less medical repute. Such use would indicate a possible value, but a mere glance will show that the change of location has neither diminished the undesirability nor enhanced the utility of the pictures. It will be observed that gynecology is invariably made the excuse for such a display, probably because the protection by copyright was extended only to the weaker sex, and copyrighted plates alone could answer all requirements.

An analysis of one of these alleged medical articles will disclose—(*a*), a double leaded heading exalting some system of posture in the treatment or cure of the indispositions of ladies: (*b*), the initials M. D., appended to some name the profession recognizes as worthy of the article produced: (*c*), an 'apology for calling the attention of the profession to a method of treatment usually overlooked, but of such vital importance, etc., etc.'; a few frayed-out platitudes, with incidental acknowledgement of indebtedness to the dealer, through whose kindness the author is able to present the following very interesting pictures; more platitudes. All together serving to introduce 'these pictures from life which will fully explain themselves without further comment:' (*d*), a series of photographs from nature, of 'the human (female) form divine,' clad in an halo of light more or less concentrated, and folded into postures in which the element of divinity is not obtrusive. Such articles deprived of their illustrations are meaningless. When fully bedecked with the unadorned beauties of nature they amount to the same thing.

There must be some value somewhere, but the exercise of common-sense will speedily discover that no value accrues to the profession at large. For this species of illustration the most radical will not claim artistic merit. To suggest that they are of use in aiding a medical man to the understanding of any subject they have served to illustrate, more than diagrams or conventional figures would, in the same connection, is an affront to the intelligence of the profession. The positions as portrayed are never seen in practice, and it would be both an insult and libel on the profession to intimate that any attempt is ever made by physicians to subject their patients to such exposure.

Useless to the profession, repulsive to the respectable, under the ban of law, such pictures would never be missed from medical literature, and when for any reason they are allowed to masquerade as

charts for the guidance of medical practitioners we are of the opinion that science would be much benefitted by a visit from St. Anthony to the journals circulating such frauds.

At present the REPORTER is not terrified by a prospect of censorial supervision of medical literature.

TRANSLATIONS.

IN CHARGE OF M. B. WERNER, M. D., AND W. A. N. DORLAND, M. D.

TUBERCULOUS TYPHLITIS AND APPENDICITIS.

In *Le Bulletin Médical*, June 25, '93, Reclus observes that the clinical reports of tuberculosis of the cecum have accumulated rapidly during recent years. The cases of Bouilly, Térrier, Hartmann, Reynier, Broca, Roux, Salzer, Billroth and Hochenegg, the anatomical researches of Duguet, Spillmann, Hérard, Cornil and Hanot, and the recent descriptions of Pilliet and of Le Bayon have thrown some light upon this hitherto but little recognized affection. The cases have been numerous enough for one to attempt to tabulate a statement of the clinical manifestations of tuberculous typhlitis and appendicitis. Reclus himself has observed two cases where a long-continued clinical history has been sustained by post-mortem examinations. This affection may manifest itself as a localized tuberculosis without infiltration, without concomitant degeneration of the lungs and other important viscera, developing itself around the ileo-cecal valve and its vicinity without invading the other tissues. This suffices to class this tuberculosis among the surgical tuberculoses; from the moment it is confined to a limited focus and this focus is accessible, in such favorable circumstances intervention is legitimate. Therefore in certain cases—and the observations are becoming daily more numerous—perityphlitic tuberculosis is an ordinary surgical affection.

As to the etiology of this condition the literature is scant; the degeneration here, as in most of the other tuberculoses, seems most frequent in adult age, but the young do not escape; a little boy 10 years of age has been cited as dying from this affection; the greatest number of the cases published, however, have been in individuals who neighbored upon or who had passed thirty years of age. It seems that two distinct anatomopathologic forms may be described, associated with different symptoms: the one a fibrous or hypertrophic and the other an ulcerous variety; moreover these may be combined, or there may be noticed all the intermediate stages between them. The majority of the cases thus far reported have been characterized by an abundant new formation which gave to the degeneration, the appearance of cancer. In this form, the tumor after incision of the abdominal parietes appears fused with the double parietal peritoneum with new membranous formations which cover the intestines and mark their limit; the original form of the cecum and its appendix, the ascending colon, the ileo-cecal valve, and the termination of the ileum cannot be recognized. There is a muscular and a mucous hypertrophy at this point which causes the intestinal wall to measure at times up to three or four centimetres. The lesions ordinarily are most marked around the ileo-cecal valve; the valve is profoundly altered from the beginning; in its place is found an irregular cavity, covered by a partly ulcerated mucosa; the loss of substance is irregular its edges sinuous, the base sanguineous with small rigid villosities. The appendix is bent upon itself and adherent at times in front of the cecum at times behind it; it is lost in the thickness of the false membrane.

The second or ulcerated form may present thickening of the serous and false membranes around the intestinal loops, but these have not the remarkable hypertrophy of the other form; on the contrary the ulcerative process predominates, the mucosa has often completely disappeared, especially at the site of the ileo-cecal

valve where ordinarily a veritable cloaca is found due to the destruction and anastomosis of the various intestinal segments. The softening of the cheesy masses in the tunics and the neighboring ganglia have given rise to puriform collections, which run in various directions, but generally make their way towards the abdominal wall; through the resulting fistulae fecal matter and pus escape. These pyo-stercorous canals are often multiple.

There exists a third form which Professor Cornil has especially studied. Often in place of the fecal concretion which forms in the appendix, some foreign body, bone, a fruit seed lodges there and by its presence irritates or perforates the vermiform process and a tuberculous forms, the bacillary colony destroying the walls.

The symptoms of the first form in the beginning is the existence of deep pains in the region, lasting for some hours during the day, then disappearing and appearing anew. This attack subsides only to reappear in a few weeks in a more aggravated form. Constipation accompanies it and may be extreme. On examination the presence of a tumor is demonstrated in the right iliac fossa hard, resisting, bosselated, irregular. In these cases where softening has taken place fluctuation may be pronounced, or the skin becomes red and the abcess opens with the formation of a fistula. The diagnosis becomes plainer still when in place of the extreme constipation a rebellious diarrhœa appears resulting from the abundant and persistent ulcerations of the mucosa. The general health does not suffer in either form at first. As to the treatment of these cases, surgical intervention is the only proper and justifiable course. D.

ETIOLOGY AND TREATMENT OF ABORTION AND PREMATURE LABOR.

Prof. Max Stumpf has collected his material for studying this subject at the Maternity, in Munich, during the period May, 1884, to November, 1889. During this time there were 446 cases of premature labor—184 cases of abortion; 115 cases of *partus immaturus*; 147 cases of *partus prematurus*. The author considers in his studies, in connection with premature labor, the age of the patient, the number of previous interrupted and mature births, as well as their causes and complications.

The treatment in 169 abortions was purely expectant and symptomatic—that is tamponing the vagina and the internal administration of ergot. Of these, 142 recovered without complications; 5 suffered from subsequent hemorrhage; 9 from infectious diseases; of these last, 5 had slight fever and 4 offensive lochia. A comparison of the cases teaches that the retention of the membranes increases the possible infection, but more particularly the dangers of subsequent hemorrhage.

In 11 cases of septic abortion, the author used 3 per cent. solution of carbolic acid as a disinfecting uterine injection. This also acted as a means of inducing uterine contractions, thus aiding in the expulsion of any remaining shreds.

The author believes that the conservative treatment in abortions will be followed by better results, and should not be displaced by active measures more recently advocated.

In *partus immaturus*, Dr. Stumpf is also inclined to wait spontaneous separation and expulsion of the contents of the uterus, adopting active measures only when persistent hemorrhage or symptoms of sepsis set in. The results in *partus immaturus* are less favorable than in abortions. Of 115 women, 5 died of sepsis; 2 of uræmia; 1 from tuberculosis; 1 from hemorrhage. The mortality due to infection treated on the expectant plan was 14.5 per cent., while the operative procedures raised the mortality to 40 per cent.—*Müch. Med. Woch.*, xxxiv, 1892.

W.

A Serious Condition.

Old Lady—Doctor, do you think there is anything the matter with my lungs?

Physician (after a careful examination)—I find, madam, that they are in a normal condition.

Old Lady (with a sigh of resignation)—And how long can I expect to live in that condition?—*Pharmaceutical Era.*

ASCITES—ITS TREATMENT FROM A GYNECOLOGICAL STANDPOINT.

Dr. Gusserou reports cases of ascites, in which disease of the circulatory apparatus such as the liver or kidneys can be excluded, the natural supposition follows that it originates from some disease of the genital organs or peritoneum. In order to make a positive diagnosis an exploratory incision should be made in the median line of the abdomen 6 cm. in length. Puncture is of no avail and often proves dangerous. It is necessary to see as well as feel in order to decide the seat of disease and whether further operative measures would be justifiable.

The various cases coming under this category can be classed as follows:

1. Ascites due to so-called tubercular peritonitis. In a case of peritonitis nodosa, Gusserou was able to effect a cure by incision, washing and draining.

2. Ascites due to papilloma of the ovaries. The cause was discovered in 4 cases only after the exploratory incision. The removal of the diseased ovaries effected the only means of relief.

3. Ascites from carcinoma of the ovaries or peritoneum, In 3 cases all diseased tissue was removed; in 5 others some malignant nodules could not be reached; and in 5 more it was impossible to remove anything. In all cases, however, the incision gave relief; in some improvement; in a few complete cure.

4. Cases of ascites produced by benign disease of the genital organs. In 1 case it was caused by fibroma of the ovary; in 2 by tubal disease; in 9 by ovarian cystoma.—*Schmidt's Jahrb.* No. 9, 1893.

W.

THE BACTERIOLOGICAL CRAZE.

This is the age of germ rabies, and stark madness has overtaken the hygienists and the public with reference to bacteric infection. Every ounce of water we drink and every cubic foot of air we breathe is supposed to be scientifically assayed, and if more bacteria than the approved minimum are found, we are threatened with terrible consequences. The joke of the matter is that the people who are the victims of the craze do not seem to be able to see farther than their noses. They are in agonies of apprehension lest their milkman may have diluted his liquor with bacteria laden water, and they excessively excite themselves if the cubic contents of their sleeping-rooms is below the scientific minimum; but they pay no regard to the fact that, from morning to night, they are imbibing monstrous doses of bacteria through other media. They never think of the danger of carrying about their person a bank-note which has been bosomed for unlimited time by a reeking fishwoman or costermonger—they box themselves up in a theatre or concert-room packed with inconceivable myriads of germs of all sorts of diseases—they suck grapes which have passed through an endless series of dirty hands, and they smoke cigars which have been lately grasped between the lips and fastened with the spittle of, perhaps, a phthisical tobacco-worker. Lastly, they will cool their glass of champagne at the most *distingue* dinner-party with the ice recently frozen off a ditch which is little better than a cloaca, and they trouble not themselves about its bacteric befoulments. We notice we are moved to these observations by the fact that this latter point has been taken up by the Parisian hygeists, and that laws are being made to control the sale of dirty ice. It has been clearly established that much of the ice used in the most aristocratic cafes and clubs is taken off ponds impregnated with every describable abomination, and that when this ice is melted, myriads of bacteria of every form of virulence are found in a state of activity. We are not to be understood to discourage precaution against the use of foul water or foul air. It is well to be clean, even though we cannot be of spotless purity, but there is no donbt that the bacteric hobby is, at present, being ridden to death, and that any of us who survive for another twenty years will then laugh heartily at the fashionable craze of to-day, just as we now laugh at the iridectomy mania, Koch's tuberculine, or any of the equally *de rigueur* crazes of the past twenty-years.—*Medical Press.*

ABSTRACTS.

CHANCRE OF THE MOUTH.

In the *Medical Record* there is a paper by Dr. Harrison Griffin, with statistics and a report of twelve cases, three occuring in children in one family. In 1200 cases of syphilis the primary chancre was situated in the region of the mouth in twelve cases.

CASE 1. Male, aged 9, had chancre of lower lip slightly to the right. He had painful enlargement of cervical and submaxillary glands on the right side; also on left side, but not so marked. Induration not to the same extent as is usually found when the sore is on the penis. A papular eruption appeared on the body soon after. The lad had received the infection by fetching beer for laborers in a pail, and occasionally drinking after a workman who was syphilitic. The boy's father was warned to supply him with a separate towel, glass, cup, etc., and to let him sleep alone; above all, not to let him kiss anyone. He was also removed from school.

CASE 2. A brother of the previous patient, aged 12, was some time after found to have a chancre on the right tonsil. The inoculation took place through a stick of candy that the elder brother had put in his mouth after the younger brother had sucked it. The history of the eruption is entirely at variance with the time that usually elapses between the presence of the chancre and the ingress of the eruption in the adult life. In the first case the eruption came out ten to twelve days after the presence of the chancre, in the second case thirteen days after the initial lesion.

CASE 3. Sister of above cases, contracted a chancre of the upper lip by kissing her brother. The eruption appeared about twenty-six days after the initial lesion.

CASE 4. Male, aged 8, had sore on right tonsil, with enlarged neighboring glands. He had contracted it from impure practices. The history of this case was very decisive.

CASE 5. Female, actress, aged 24, with chancre on lip. She made-up for the stage in the same room with another actress, who was found afterwards to be syphilitic. The medium of contagion was supposed to be the rouge-pot.

CASE 6. Female, aged 18, contracted a chancre of the lip by kissing. There was eruption of the skin and enlargement of the glands.

CASE 7. Female, aged 23, with chancre of lip. Infected by her syphilitic husband.

CASE 8. Male, aged 42, chancre on upper lip. Drinking whisky from bottle after some friends, one of whom was syphilitic, was the mode of contagion.

CASE 9. Male, aged 28; mucous patches at tip and side of tongue, and also covering inside of lower lip. He had been married six weeks, although he knew he was suffering from syphilis. He was forbidden to kiss his wife. Three weeks later his wife was found to be infected with a chancre on the upper portion of the tongue. She suffered from an extensive tubercular eruption; large ulcerated spots covered her back and breast; it was a case of malignant syphilis.

CASE 10. Female, married, aged 28, chancre of upper lip. Contracted through kissing her syphilitic husband.

CASE 11. Male, married, aged 30; contracted chancre from prostitute. Inoculated his wife with chancre of the lip.

CASE 12. Female, cook, aged 20; caught sore on lip by kissing her lover, who was suffering from mucous patches of the lips and tongue. On account of its early diagnosis, the disease was not transmitted to the young children of the family.

Considering how readily the mucous patch of the mouth will inoculate a chancre, it seems strange that there are not more cases reported of the primary lesion occuring in this locality.

PHYSICIAN (with ear to patient's chest): "There is a curious swelling over the region of the heart, sir, which must be reduced at once."

PATIENT (anxiously): "That swelling is my pocket-book, doctor. Please don't reduce it too much."—*Our Dumb Animals.*

CONCERNING TYPHOID FEVER.

Dr. Victor C. Vaughan (*Medical News*) says:

There may be such a thing as typho-malarial fever, but no man has ever, as yet, demonstrated its existence. To-day there are three theories concerning the causation of typhoid fever:

1. The German theory, that typhoid is caused by a certain germ; that it is a specific disease, the same as smallpox. One of the definite characteristics of the germ is that it will grow upon a potato, forming an invisible growth. The Koch-Eberth germ is the only germ capable of causing typhoid fever.

2. Another theory we may designate as the French theory, which is that the cause is a modified form of the bacillus *coli communis*, which sometimes acquires extraordinary virulence. If the French theory is correct, the pollution of water with any fæcal matter may cause typhoid fever. If the German theory is correct, it would be perfectly safe to drink all the fæcal matter you wish, provided it comes from healthy persons.

3. There is another theory, and that is that typhoid fever may be caused by any one of a number of germs, which are closely related to one another, but which are not connected either morphologically or physiologically, and consequently we cannot expect the symptoms to be the same in the cases.

For the last twelve or fifteen years I have, on account of certain official positions, investigated every outbreak of typhoid in the State of Michigan, and for the last six or seven years I have accompanied these with a bacteriological examination, both of the drinking-water supply and, for the last two or three years, of the spleens of the persons dead from typhoid fever. While I have seen thousands of cases of typhoid fever, I have yet to see a case of *typical* typhoid fever, as described in the text books, where the temperature is graded day after day. Of course, in many of these cases the temperature is interrupted by the treatment. Further I have never, as yet, found in the drinking-water, or in the spleen of a person dead from typhoid fever, a germ identical with the supposed specific germ. Occasionally I have found germs which form an invisible growth on potato, but they have been different from the Eberth germ. In a recent outbreak at Ironbrook I inoculated beef-tea, and after twenty-four hours injected it into animals. The germs was then found in the spleen, kidney, and liver. I directed sent to me the spleens of all persons dead from typhoid fever, and in these, which were quite a number, I found the same germs as in water. I think this pretty positive proof that the germ caused the disease. I think we have a group of causes, just as in the vegetable world we have a number of plants which produce poison, varying in virulence according to the conditions in which the plant grows. Tobacco grown upon different kinds of soil will show changes. Why not germs, which pass through a number of generations in a short time? A woman living in the country does not go from home but dies from typhoid fever. A post-mortem is held, and it is found to be true typhoid fever. Some contend that such cases are caused by infection carried by a tramp with walking typhoid fever, who, visiting the various watering places, infects the neighborhood. There are annually 50,000 deaths in this country of typhoid fever, and 500,000 sick with it. This shows that the germs must be widely distributed. I am sure that healthy individuals aid in distributing the disease.

The Testicle in Hereditary Syphilis.

1. The testicles may be affected so slightly in congenital syphilis that it needs the microscope to detect the malady. 2. In a small percentage of cases of congenital syphilis, the lesions of the testicle are such that they can be detected by physical examination. It appears, as a rule, in the first two or three years of life. 3. The globe is chiefly affected; and there is no affection of the prostate, vas, or vesiculæ. 4. The disease is frequently bilateral. 5. Hydrocele is fairly frequent, the swelling is painless, and may be nodular. 6. The enlargement great. The microscopical appearances are those of inflammation of the fibrous tissue framework of the organ, leading to fibrosis, and, if the disease is not checked, to atrophy of the organ. Gummata are rare.—CARPENTER.

A COMMITTEE ON DRINK.

In all the more highly civilized countries that venerable puzzle, the drink problem, is forcing itself upon the attention of the authorities in government and science. Science, hitherto, has meddled with it comparatively little. The chief fighters against drink in our line have been the temperance enthusiasts, whose appreciation of the evils of it have been sufficiently vivid, and whose zeal has been intense, but not always according to knowledge. Legislation on the subject has aimed chiefly to keep drink away from men, but its results, where it has had a fair trial, as in Iowa or Maine, have not been altogether satisfactory. In England just now measures are under consideration which aim not to keep drink from drunkards, but to keep drunkards from drink. The submission of plans with such an object marks in itself a considerable progress of opinion in a country where the right to be peaceably drunk has always been considered one of the natural privileges of citizenship. A committee of eminent physicians and persons skilled in dealing with animals, appointed by the Salisbury government, has submitted to Parliament a report recommending that power be given to magistrates to commit drunkards to reformatories for a period not exceeding two years. The committee found that many drunkards were cured in reformatories, and that many more of them would be cured if they could be kept sufficiently long under restraint and treatment. It proposes that drunkards who voluntarily enter such retreats should be kept until discharged; that the semi-criminal habitual drunkards, with whom the police have to deal, should receive intermediate sentences of not less than one year, and that magistrates should be empowered to commit ordinary inebriates on the petition of relatives, or in their own descetion. It also proposes to empower the police to arrest without a warrant all persons found drunk in public, and to lock them up for trial. The report, as will be seen, practically denies the right of the contemporary Briton to be a drunkard, or even to be publicly tipsy. If it is adopted, and its recommendations enforced, it would seem likely to make intoxication much less satisfactory, and possibly less popular, in Great Britain than it is at present.

In France, too, the same subject is under serious discussion by experts. M. Zola, after his recent visit to London, expressed himself as profoundly shocked by the consumption of intoxicants by English ladies. French ladies probably drink less, but that French men at least are injudicious in their potations appears very clearly from the published conclusions of M. Charles Fere, the well-known Parisian authority on nervous diseases, who notices an immense increase in France of the maladies which are his special charge, and thinks it due "to the increase in beer-drinking, absinthe-drinking, and bars." Dr. Fere says that twenty-three years ago there was hardly such a thing as a bar in all Paris, but now "one sees them all over the town, and always crowded." He attributes their spread largely to the growth of the passion, now said to be well-nigh universal in Paris, of betting on race-horses. Bars and low eating-houses, where alcoholic drink is sold with or without food, are the centres of resort, he finds, for those small tradesmen, cabmen, cooks, artisans, and so on, who want to get tips and enter into sporting transactions. To the account of this sort of drinking Dr. Fere lays the increased development of nervous and mental diseases in infants—an increase which he thinks so serious in amount and so menacing in its portents that he declares that alcoholic drinks are now the great enemy of the races which do not abstain from them, and that if the Aryans go on tippling as they do, they must finally give way to Jews, Arabs, and Chinese.

This is a serious view to take of contemporary drink, and it carries the more weight because it expresses the opinion not of a lay enthusiaist, but of a scientific specialist.

The popular impression is that temperance in drink is advancing in this country, but it is reassuring to know that the whole subject has attracted the attention of a body of men who would seem to be exceptionally well fitted to deal with it in all its respects. The "Sociological Group" has interested itself in the drink problem. The Group began five years ago with fifteen members, including Bishop Potter, T. T. Munger, Seth Low, Richard T. Ely,

Charles A. Briggs, Washington Gladden, Edward J. Phelps, and Charles Dudley Warner. Its purpose is the study of modern social questions. At a meeting last spring it voted to form a committee of fifty to investigate the liquor problem, and to that end appointed a committee from its own body to nominate the fifty members. This has been done, and October 20th was the day set for the larger committee to meet, at the United Charities Buildings in New York, for organization and reports.

Here is a committee from the labors of which it would seem that results of real importance might be looked for. The Group proposed that its committee should consider its problem in its physiological, its ethical, and its legislative aspects. The committee includes eminent experts, equal to the consideration of all these aspects, and others besides. Besides the members of the Group it includes such divines as Cardinal Gibbons, Archbishop Ireland, Rabbi Gottheil, Bishop Gailor, Bishop E. G. Andrews, Dr. W. R. Huntington, Dr. W. S. Rainsford, and others not less distinguished. Among its scientists are Dr. J. S. Billings, Professors Bowditch of Harvard, and Furnam and Chittenden of Yale, and Dr. Weir Mitchell. Among its educators are President Eliot, President D. C. Gilman, and General F. A. Walker. Among men of affairs and employers of labor it has Frank Thompson, Marshall Field, and Cornelius Vanderbilt. Altogether it is a remarkable committee, fit in weight and intelligence to cope with a titanic problem. At the meeting last month the sub-committee on the ethical aspects of drink was to have made a report. The report of the committee on physiological aspects had already come in before that meeting, and maps out an exhaustive inquiry, including investigation of the effects of normal and of abnormal constituents of alcoholic drinks, and of combinations of the two. It proposes physiological experiments, which, it seems, will cost some $30,000, but if such a committee is really in earnest they will not be daunted by considerations of expense.

The American public is very generally interested in the drink problem, and wants the surest and latest information about it. It will rejoice to know that such a body of men as the Sociological Group's Committee is sounding the depths of the subject, and will look for important results from its labors. It will wish to know the committee's opinion of the patent cures for alcoholism that so greatly abounds just now, and what conclusion it reaches as to prohibition, local option, and the Guttenburg plan. It will also consider with especial attention the views of the committee on the broad and much-mooted questions whether alcohol is a poison which may be tolerated in moderate doses, or a useful servant of man when not abused.

Is alcohol good or bad for civilized man? That, after all, is the query that lies at the centre of the liquor problem. The doctors disagree about it. What will this committee say?

NARCOLEPSY.

Sleep is a function which though in itself is very wonderful, is yet so familiar to us that its phenomena seldom excite more than an emphemeral interest. It is only when it supervenes under unwonted circumstances that interest is stimulated, and that one is tempted to inquire further into its pathology. The capacity for sleep differs considerably as between different individuals. While some fortunate persons can wander off into dreamland at a moment's notice, in train or tram, or in the intervals of conversation, others are fain to woo the fickle goddess who shows herself coy and hard to please even under the most favorable conditions. In both cases, however, sleep, when it does come, is what we are accustomed to look upon as normal physiological repose. It is quite otherwise when it comes on with the suddenness and inopportuness of a sneeze. In some cases the resemblance with epileptic coma is so close that a well-known authority used to remark that the sleep of certain patients resembles a mild epileptic attack. Generally speaking, sleep is preceded by sequential prodromal indications, such as heaviness of the supra-orbital region, constriction on a level with the temples, a feeling of vacuum in the fore-

head, a tendency to dangling of the head, yawning, etc., and it follows fatigue or supervenes in deference to long-established custom. In a large number of pathological conditions associated with disturbances of circulation or nutrition, diseases of the head or liver, digestive troubles, hysteria, etc., the inclination to sleep shows itself in a peremptory fashion and positively strikes down its victims for all the world like a fainting or other "fit." To this affection, for it sometimes borders on a morbid condition, the term narcolepsy has been applied. Not only may the subject fall as if stricken, under the imperious and not-to-be-resisted empire of sleep, but he may remain plunged in a lethargy so profound that no stimulus will awaken him, in fact, his slumber resembles slight epileptic coma. Another remarkable feature about this unnatural slumber is that it supervenes under circumstances which do not usually conduce to a nap. The subject may be seized in the middle of a meal, or while walking, or a fit of sleep may bring what might otherwise have proved an interesting conversation to an abrupt conclusion. Sometimes the attacks of sleepiness last but a minute or two, at others they persist for hours, not to say for days. Sometimes, too, the attacks occur only once a month or so, at others they may be repeated a hundred times or more in the day. In subjects prone to this peculiar manifestation any form of muscular or mental activity may determine an attack, such for instance as a long walk, defæcation, coitus, sustained attention to one subject, or some moral emotion. This paroxysmal sleep is a form in which all the normal phenomena of natural slumber are exaggerated, while muscular resolution is unduly pronounced, and may even run on to contractures. Respiration may fall to ten, and the pulse to fifty, a minute. The pupils are usually more or less markedly dilated, another point of resemblance with epilepsy. At the same time narcolepsy is usually neither a neurosis nor a malady. It occurs in a large number of conditions in which there is some disturbance of nutrition or some circulatory derangement, either in consequence of an alteration in the composition of the blood or a fall in intra-arterial pressure due to functional exhaustion. It is to a certain extent physiological, as, for example, when it supervenes in men who have eaten or drunk too much, or who, having passed middle life, still "enjoy life." It is a common symptom in hysterical and neurasthenic subjects, but is then an indication of functional disturbance of the cerebral circulation. The etiology indeed points to a special exhaustibility of the entire nervous system. In diabetes, gravel, or simple obesity the morbid sleep may amount to a sort of mild coma. When the attacks occur in epileptic subjects they present this peculiarity, that they are usually amenable to the influences of the bromides. Narcolepsy possesses a certain medico-legal interest, because its manifestations are sometimes mistaken for the effects of alcohol, indeed, many victims of this tendency live in dread of their infirmity exposing them to the suspicion of inebriety. It is evident that the differential diagnosis of necrolepsy pure and simple from the numerous conditions associated with more or less profound unconsciousness must often present considerable difficulty; indeed, unless the practitioner is enabled to derive a clue from the personal history of the patient he may not be able forthwith to decide as to the exact nature of the attack. Inasmuch as the etiology of narcolepsy is various, so its prognostic importance is grave or benign, according to its immediate source. Of grave import in organic affections of the circulatory apparatus, in maladies affecting nutrition, in general paralysis, and in dementia, it is a perfectly curable affection in hysteria and neurasthenia. In epilepsy the prognosis is that of this disease in general, and under a suitable treatment the attacks become less numerous and less intense. Apart from its own special prognostic importance, narcolepsy is generally a symptom of bad augury in organic maladies in the course of which it occurs as a symptom. In certain ataxic patients, for instance, it is sometimes the first cerebral symptom, the significance of which must be borne in mind. As a general rule the treatment of narcolepsy is that of the malady in the course of which it occurs, but there are certain special measures calculated to minimise its incidence, such as venesection, hydrotherapy, baths of compressed air, and inhalations of oxygen, and the last named has in several instances given really remarkable results.—*The Med. Press and Circular.*

CURRENT LITERATURE REVIEWED.

IN CHARGE OF ELLISTON J. MORRIS, M. D.

THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES.

for December. An interesting paper in this month's issue is that by Dr. M. H. Richardson and Dr. G. L. Walton entitled

A Contribution to the Study of Cerebral Surgery, based on an Operation for the Removal of a Tumor.

The operation was unsuccessful in regard to the removal of the tumor as it could not be defined owing to its deep situation in the brain substance. The patient was at first much relieved as the result of the operation but finally died, fifty-one days after the operation. The diagnosis of the seat of the tumor by means of the localization symptoms was shown at the autopsy to have been correct. The difficulty of using the rongeur forceps after the dura mater was opened would lead the authors to enlarge the opening to the fullest extent deemed likely to be required before cutting the dura mater in all cases where the pressure of the brain seemed great. The plan of cutting out a semicircle of bone and reflecting skull and skin together, breaking the lower edge for the purpose, has not recommended itself to the writers as necessarily more practicable than the old method of trephining and enlarging. They believe that the patient is safer with the bone removed than replaced, even when replaced under the most favorable circumstances. The absence of even large pieces of bone, though apparently disadvantageous, has been proved by experience to detract in no material way either from the patient's comfort or safety, whereas replaced bone is always a possible source of future trouble.

Dr. D. D. Stewart contributes a paper on

The Occurrence of a Form of Chronic Bright's Disease, Other than Typical Fibroid Kidney, Without Albuminuria.

The teaching of the paper is that but little stress can be laid on the mere absence of albumin from the urine in rejecting or confirming a diagnosis of chronic Bright's disease; that in any instance in which an examination for albumin is demanded as a part of an investigation to detect or exclude kidney disease, no decided opinion dare be ventured as to the absence of the latter without further search of the urine, to determine not only the mere presence of or absence of morphological kidney elements, such as casts or epithelium, but also to discover the condition of the secretory renal function. As the latter can only be determined by an examination of a mixed twenty-four hours' specimen of urine, the total daily amount passed must be known. It should, therefore, be a rule, admitting of no deviation, in all cases of suspected Bright's disease in which albumin is undetectable in a single unmixed specimen, to obtain that of the total of one or, which is better, a consecutive series of twenty-four hours. Then too, when albumin is absent in a single unmixed specimen, it may sometimes be discovered in that of the total twenty-four hours, when the more delicate tests are intelligently employed. The author advises the use of the centrifugal machine for the precipitation of the sediment in the urine.

Dr. Maximillian Herzog contributes a paper on

Tuberculosis of the Nasal Mucous Membrane,

reporting ten new cases. The author presents the following conclusions:

1. Tuberculosis of the nasal mucous membrane, compared with tuberculosis of other parts of the respiratory tract, preferably with this affection of the lungs and larynx, is a rare disease; it is, however, not as rare as formerly supposed.

2. It is generally a secondary affection, but occurs primarily, as proven by unmistakable clinical evidence and by post-mortem facts.

3. Where it occurs it is frequently secondary to pulmonary and laryngeal phthisis.

4. It occurs in the form of ulceration, tumors, and a combination of both. The tumor is generally found in primary cases, while the ulceration is the prominent factor in advanced cases of phthisis.

5. It may occur at any age (except, probably, in the very earliest months of life), preferably at the ages between ten and forty years.

6. It does not show any predilection as to sex.

7. Its seat is preferably the septum cartilagineum.

8. Its course is very chronic, and relapses even after surgical interference are the rule.

9. It is, *per se*, not dangerous to life, but may eventually lead to fatal complications, such as basilar meningitis, and possibly miliary tuberculosis.

10. One of its most important direct complications by continuity, is that with tuberculosis of the naso-lachrymal duct and the conjunctiva.

11. It may also be complicated with tuberculosis of the pharynx, palate, tongue, external integument; lupus of the nose, face; tuberculosis of the cervical glands, empyema of the antrum of Highmore, etc.

12. Lupus of the face, or of the nasal mucous membrane, may in its further development lead to tuberculosis of the nasal mucous membrane.

The paper also includes a statistical table of eighty cases of tuberculosis of the nasal mucous membrane reported in medical literature.

A Contributinn to the Study of the Treatment of Appendictis

is the title of a paper by Dr. Miles F. Porter. The author also includes a tabulation of four hundred and forty-eight cases including seven cases of his own. The difficulties of

diagnosis and the question of operation are cited. The author concludes that the danger of recurrence and the presence of a tumor are not in themselves sufficient grounds for operation. Two facts however seem settled: 1. when an operation is to be done, the earlier it is done the better the chance for recovery. 2. The character of the attack and consequent condition of the patient, and not the number of hours or days of illness, should form the basis of decision as to the proper time for operation. The author does not believe that the appendix should be removed if the adhesions are such that the attempt to release them will add to the gravity of the operation. In regard to the incision, he says that where there is a tumor this may be taken for a guide; in the absence of tumor the best site is in the right semilunaris. He advocates the Trendelenberg posture in operating. The stump of the appendix should be carefully covered with peritoneum after ligation. If this is not done, the removal of the appendix leaves the patient in great danger of perforation.

Dr. T. D. Dunn reports a case of "Pelosis Rheumatica in a Bleeder." The case reported supports the view that the disease is a special affection of which the arthritis is a manifestation analogus to that which occurs in hæmophilia.

The remaining paper in this issue is by Dr. George J. Engleman entitled "Recent Investigations in Faradic Electricity."

THE TRI-STATE MEDICAL JOURNAL

for December. Dr. F. Byron Robinson contributes an interesting paper on

Axial Rotation of Tumors and Viscera; Twisting of Pedicles.

The ætiology of axial rotation is imperfectly known, and the author, after reviewing the opinions of various authorities, suggests that visceral rhythm is the cause, viz: breathing, expansion and contraction of the digestive tract, the rhythm of the liver and spleen, and the filling and emptying of the bladder and uterus. Adhesions prevent rotation. The tumor rotates toward the middle line nearly always. In regard to the rotation of viscera, the author has found the cæcum rotated on itself in autopsies but the rotation did not affect the fæcal current. In experiments on dogs he tried to produce axial rotation of the sigmoid flexure—volvulus—but it always unwound itself and he never could retain the volvulus even by suturing it. The author states that however black cysts with twisted pedicles appear, they never show gangrenous tissue unless they have been tapped. In the diagnosis one of the first points is the previous existence of a tumor. The next matter is that the abdomen slowly or rapidly enlarges. The onset of the actual rotation may be sudden abdominal pain, fainting, pallor or nausea. If the woman be pregnant and also has a tumor, then torsion may be considered.

The treatment of axial rotation is abdominal section promptly applied. It is peculiar that most of the tumors that have been twisted on their axis till they have been twisted off their pedicles have been dermoids.

A Plea for the Appropriation of Criminals, Condemned to Capital Punishment, to the Experimental Physiologist,

is the title of a most remarkable paper by Dr. J. S. Pyle. The author thinks that a great advance would be made in medical science, and especially in brain surgery, if experimentation were allowed on condemned criminals. Various portions of the brain could be stimulated and the different centers of motion and thought more accurately localized.

"To secure co-operation and carry out the experiment successfully the condemned would be instructed with the nature of the work, assured that no torture would be instituted; that the preparation of removing a piece of the skull and cerebral membranes should take place under the influence of an anæsthetic; and, while he should be allowed to regain consciousness to be interrogated, that no pain would be occasioned thereby; lastly, that his death should occur when in a profound sleep. This would, it would seem, remove the appearance of revenge and barbarity and convert such an occasion into one of real utility both socially and scientifically."

"The State would be doing its duty to take up this matter and make the new form of execution a recognized law. In this, crime would be punished, society protected and loss compensated. The outcome would be a very important one to criminal law, as the manner of arriving at the grounds for requiring the death punishment would be entirely changed and it is believed highly satisfactory. Death would be enforced as an obligatory measure. The criminal, instead of dying the death of a felon, would redress his offense to the State and society by offering himself as a public benefactor. He would stand to be tried as to whether he should pay society for the loss it had sustained and the State the expense of a fair and impartial trial." A building should be specially erected for the purpose and equiped with every form of physiological apparatus required. The executions should be under the charge of an expert body of physiologists and results of the experiments should be published in a report at the conclusion of each execution.

[The author believes that the chief opposition to his scheme will come from morbid sentimentalists. The editor of this department will probably be classed as such by the author, but it would seem to him better to abolish entirely the death penalty than to add to its horrors those of the visvisection table.—ED.]

Dr. C. E. Ruth reports a case of

Excision of the Cæcum; Approximation of the End of the Ileum to the End of the Colon with the Murphy Button,

in a patient five and one-half years old. The author states that this is the first excision to his knowledge, in one so young, for intestinal obstruction due to neoplasm; and the first in which the Murphy button has been used to make an end to end junction of the ileum to colon with excision of the cæcum, in the

human subject. The patient made a good recovery. The author presents the following facts in favor of the Murphy button:

1st. It furnishes the strongest junction known.

2nd. We do not need to wait five days to get strong union; it is immediately obtained with proper approximation of the segments.

3rd. In urgent cases nourishment can be commenced at once, which would be scarcely thought of in connection with any suture or plate device.

4th. No foreign body is left permanently in the walls or caliber of the gut to cause subsequent trouble.

5th. In anastomoses between the gall bladder and duodenum; in the formation of biliary, gastric, or fæcal fistulæ, externally, and by Bacon's method of treating non-malignant strictures of the rectum, it leaves nothing to be desired.

6th. If circular enterorrhaphys, *undoubtedly the ideal approximations*, are ever justifiable, it is by this means, as it minimizes the objections urged against the operation, viz.,—weakness at the mesenteric attachment and subsequent contraction.

7th. The union can be made in less time than by any other means, thereby greatly lessening the primary mortality.

The article is illustrated by two wood cuts showing the removed cæcum.

Dr. W. W. Grant discusses the "Indications for and Value of the Uterine Curette," advocating the use of the dull tubular spoon-curette with full antiseptic precautions.

Dr. John I. Skelly, in an article on "The Country Doctor," pays an eloquent tribute to the practitioner living out of the cities. He points out that the country doctor is the father of ovariotomy and of many other operations and also that he has added much to our knowledge of materia medica.

The Tri-State Medical Journal is a newcomer among the ranks of medical magazines. It has our hearty good wishes for success.

PERISCOPE.

IN CHARGE OF WILLIAM H. BRICKER, M. D., B. SC.

THERAPEUTICS.

Modern Pathology and the Pathology of Nervous Diseases, with some Therapeutical Deductions and Experiments with Organic Extracts.

Charles L. Danna, A. M., M. D. (*Bost. Med. and Surg. Jour.*): The author sums up as follows:

1. The term inflammation has to be applied more carefully and with restrictions to nervous diseases. Many forms or cases of meningitis and myelitis are toxæmias or processes secondary to mechanical injury. There cannot be inflammation without specific cause. 2. In the organic neuroses of degenerative type there is a toxine of extrinsic or intrinsic origin, which is negatively chemotactic. The body cells and proteids cannot defend the special parenchyma against it. The degenerations, including muscular atrophies and primary sclerosis, are of toxic origin. There is a poison at work which it should be the effort of neurological science to antagonize and combat. 3. In the chronic neuroses of functional origin, so called, such as paralysis agitans, chorea, epilepsy, and Basedow's disease, there is a toxic factor which is of fundamental importance. This may be due to defective gland action, as in Basedow's disease and in myxœdema, or to humoral poisons of other origin. Many neuroses are really glandular or nutritive or infectious diseases. 4. Another element of equal importance in the etiology of the neuroses is an inborn or acquired lack of resistance to injurious agents, whether engendered within or introduced from without. This diminished power is in some instances produced by strong emotions and shocks, and the nerve-centres become susceptible to the action of poisons which continue and keep up the disease. Hence in treating the chronic neuroses two kinds of measures are to be employed: first, those which increase the strength and resisting powers of the organism; second, those which are of anti-toxic or specific character. There are probably specific cures for many diseases which we now regard as hopeless. 5. The toxic origin of myxœdema has been established, and made probable in exophthalmic goitre, paralysis agitans, and chorea, and the importance of a toxic element has been shown in epilepsy. 6. By the term toxine is meant the product of defective metabolism, due either to defective gland action, microbic growth, or the extrinsic vegetable and mineral poisons.

Effect of Pilocarpine in Changing the Color of the Hair.

D. Webster Prentiss (*Epitome of Medic.*, 1893): Having used pilocarpine with great success in a case of uræmia, Dr. Prentiss was much interested by its effect on the patient's hair. The drug was administered by the hypodermatic method in doses of one centigramme, and the total amount injected (in two or three days) was forty centigrammes. The hair, which previous to this time had been a light brown, began rapidly to change its color to dark brown, and later became black. It also became coarser and thicker. These changes occurred not only in the hair of the head, but also in that of the other parts

of the body. The author states that two similar cases though less marked—have been recorded; and speaks of the occasional effect of pilocarpine in promoting the growth of hair to a marked extent.

MEDICINE

The Relation of the Patellar-Tendon Reflex to some of the ocular Reflexes Found in General Paralysis of the insane.

Dr. Charles A. Oliver, presents the following formulation.

1. In some of the cases in the second stage of the disease, especially where the patellar-tendon reflexes were unequally exaggerated, there appeared to be an irregular and unequal spastic ennervation of the two irides, causing irregularities in pin-point pupil forms.

2. In a few cases, especially in the third stage of the disorder, where the patellar-tendon reflexes were unequally diminished, the pupil-size though small and its shape though somewhat irregular, seemed to be but little acted upon by any powerful mydriatic.

3. In many cases, especially in comparatively young subjects in the third stage of the disease where the patellar-tendon reflexes were unequally diminished there appeared to be an unequal paralytic ennervation of the two irides; the pupillary dilatation manifesting itself at times, though not as a rule, in the eye with the greater amount of objective optic-head degeneration and retinal change.

4. In a few cases (especially in men beyond middle life) in the third stage of the disorder, where the patellar reflex were markedly diminished and where the ataxias were quite pronounced, there were marked temporary assymetries of pupillary form, one often being quite small and irregular for several examination, whilst its fellow was large and ovoid or oval.

5. In quite a number of cases, especially in the advanced stages of the disease (although seen in a number of cases in their earliest stages) where the patellar-tendon reflexes were unequally exaggerated or diminished, there was a failure of the irides to respond to even major degrees of light stimulus; this being true not only for those subjects exhibiting a true spastic myosis but more especially shown in those instances where with partial dilatation of the pupil, mydriatics failed to act.

6. In many instances, especially in the older cases where the patellar-tendon reflexes were, as a rule, unequally diminished or even lost, there was not only failure of iris-response to the strongest light stimulus carefully thrown upon the retina, but where obtainable, the irides seemed to fail to react to the various coarse and rough subjective and objective procedures necessary to be used in order to evolve both separated and associated efforts for accommodation and associated efforts for convergence.

7. In some instances, where ciliary muscle innervation could be satisfactorily obtained, both the spastic excitation and the paralytic enervation at times found by subjective reading tests and objective study with the retinoscope, seemed to be in direct ratio with the patellar-tendon reflexes as the iridic changes.

8. In quite a number of cases where there was marked inequality of the pupils with more or less want of reaction of the irides to light stimulus the patellar-tendon reflex on the side of the larger pupil seemed to be the one the more greatly diminished.

9. In a number of instances, especially during the very earliest stages of the disease, where the patellar-tendon reflexes were beginning to lessen to unequal degrees, there often appeared momentary secondary ataxic dilatation of the pupil during exposure to strong light stimulation.

10. In many cases, especially during the second stage of the disorder, when the patellar-tendon reflexes began to become irregular and inconstant, pupillary inequalities as expressive of unequal iris innervation and action, becomes more and more constant.—*Bost. Med. and Surg. Jour.*

Subcutaneous Injections of Salol in the Treatment of Tuberculosis.

According to the *Jour. de Med. de Paris*, Grasset has obtained very satisfactory results in the treatment of tuberculosis by the subcutaneous injection of salol. The advantages claimed are the decrease in the fever and night-sweats, with a simultaneous moderation of the cough and the number of bacilli. He employs salol with oil in the following mixture:

℞ Sweet oil..... ʒi.
Salol..... ʒiiss.

This is given with a syringe which contains five drachms. The injection is made underneath the skin, and Grasset asserts that within twenty minutes after its use salicylic acid may be obtained from the urine. The injections should be given in those portions of the body where the subcutaneous tissues are loose, as there is always slight induration produced, which, however, shortly passes away.

Observations on the Nature and Treatment of Angina Pectoris.

After an interesting discussion of the subject heading this article, Dr. J. Burney Yeo (*Practitioner*), reaches the following conclusions:

The true indications for treatment in angina pectoris may be thus summarized:

1. To maintain or improve, when defective, the general nutrition; to avoid all strain, physical and emotional; and so to relieve cardiac feebleness and excessive effort.

2. To relieve dyspeptic conditions and flatulent or fæcal distention of the stomach and intestines.

3. To forbid the habitual consumption of agents which may exercise a toxic action on the heart, such as tea, coffee, tobacco,

alcohol, etc., or that may introduce or develop toxines in the alimentary canal.

4. To avoid and remove all gouty and other bloody contaminations.

5. To give such tonic remedies as may improve the cardiac tone and lessen existing tendencies to cardio-vascular degeneration.

6. To relieve the paroxysmal attacks by sedatives and stimulants.

The Treatment of Diabetes.

Dr. George Harley (*Br. Med. Journ.*) divides diabetes into the following varieties:

1. Hepatic diabetes—including the gouty variety.

2. Cerebral diabetes—including all cases of saccharine urine arising from nerve derangements.

3. Pancreatic diabetes—the most deadly form of the disease.

4. Hereditary diabetes—a form by no means uncommon, and one where both brothers and sisters may labor under the disease without either their maternal or paternal parent having been affected by diabetes, though more distant members of the family may have suffered from it.

5. Food diabetes—including all forms of saccharine urine arising from the injestion of unwholesome substances.

Diabetes in a Baby.

MM. Duflocq and Dauchez report a curious case of death from diabetic coma of an infant of only eighteen months of age. When M. Dauchez first saw the child on January 6, 1893, he found it had been peevish and uncomfortable for only about a fortnight. It was very thin, weak, and of somewhat venous tint, and its discomforts were attributed by its parents to its teething, but to the doctor's ear the history of constipation sounded more serious. He gave it gentle purgatives and stimulants, and did not attribute any special importance to the mother's statement that it was drinking more than four pints of milk a day. Next day it was much weaker and more cyanotic, and the temperature had sunk to 96° F. More energetic measures were taken; it was wrapped in cotton wool and given punch, ammonium carbonate, and an enema of coffee. M. Duflocq was called in and found the baby comatose, with lost corneal reflex, quick breathing, and dry tongue. It did not feel the injections of ether, and in a few hours was dead, *i. e.* in less than thirty-six hours from the time when medical advice was first called in. The possibility of diabetic coma was recognized, and a little further search showed white powdery patches on the napkins and bed-linen, and an abundant amount of glucose by further chemical analysis. Dr. Conolly has recorded (*Med. Times and Gaz.*, July, 1874) a very similar case in a child of twenty-one months, with marked constipation ending in sudden coma; and instances have been given by Busch (*Ugeskrift for Læger*, March 24, 1875,) Hauner, and Rosebach (*Berl. klin. Woch.*, 1874), at a still earlier age. In the two last cases, however, death resulted from exhaustion rather than from coma. Hagenbach relates another case where death came on from pulmonary gangrene in a child of 6 months. There is one case to quote of recovery, in a little baby of Dr. Kitselle's, who was made out by his father within a fortnight of his birth to have diabetes, but who got over it by the time he was eight months old under careful treatment. (*Revue de Med.*)—*The Practitioner.*

Changes and Degenerations in Nævi.

Reboul (*Archiv. gen. de Med.*, May to October, 1893) says that nævi are tumors which are congenital in their origin, and on this account they are able to give rise to the formation of a variety of benign and malignant tumors. In a considerable number of cases they disappear spontaneously after birth, but in others they remain apparently stationary, and then they must be carefully watched so as to detect any changes which may take place in them. Whenever the least sign of extention, transformation, or malignant degeneration appears, it is necessary at once to adopt active measures, and to remove them freely. When they undergo malignant degeneration, especially of the melanotic variety, they must be regarded as infectious, and in the performance of operations for their removal, every precaution must be taken which will tend to prevent a local infection, which may become the point of commencement of a generalization of the growth, and hence lead to a fatal termination.

SURGERY.

Amputation for Diabetic Gangrene.

Mr. Pearce Gould amputated by Stephen Smith's method the right leg of a man, aged seventy-four, for gangrene of the three inner toes extending into the sole and slowly spreading; the arteries were atheromatous, the amount of urine passed per day was from seventy to eighty ounces, in which there were eight and three-quarter grains of sugar to the ounce. this amount, however, was reduced to six grains per ounce by restricted diet; the patient was edentulous, the skin was dry, and there was right cataract. After removing the limb Mr. Gould remarked that diabetes used to be considered a bar to operation, but more recent experience has shown that with asepsis operations may be safely performed, and often with great advantage on patient afflicted with this malady. He said the connection between diabetes and gangrene seemed to be threefold:

1. Senile gangrene from atheromatous arteries in a diabetic.

2. Acute spreading gangrene due to the diminished resistance of the tissues of diabetics to septic processes.

3. Gangrene from trophic changes.

In the first two forms amputation, he thought, should be remote from the disease,

such as through or above the knee for gangrene of the toes; but in the third form he considered the operation may be performed just above the dead tissues.

He referred to a case in which he had amputated through the knee for spreading cellulitis and gangrene about the ankle in a diabetic patient who had made a good recovery, and from whose urine the sugar disappeared a weak after the operation.—*Med. Press and Circular.*

Duncan (J.) on the Surgical Treatment of Gall-Stones.

The conclusions which he draws from his experience in the surgical treatment of gall-stones are,—

1. That when the stones lie in the gall-bladder or lightly impacted in the cystic duct, cholecystotomy is a safe and esay operation.

2. That if the stone be impacted in the common duct, the gall-bladder is apt to be small, and such structures as the stomach and colon are prone to be adherent in awkward positions.

3. That in such cases it is safe to incise the duct and drain from the wound.

4. That considering the perfect health enjoyed by patients wite biliary fistula, there are few cases in which it would be justifiable to form a new route for the bile into the bowel.—*Edinburgh Mee. Jour.*

Antiseptic Varnish—Steresol.

Berlioz (*Jour. de Med. et de Chir Pratiques*) prepares an antiseptic varnish, which he terms steresol, by mixing the following ingredients:

℞ Purified shellac, 279 grammes;
Purified benzoin, entirely soluble in alcohol, 10 grammes,
Balsam of Tolu, 10 grammes;
Crystallized carbolic acid, 100 grammes;
Chinese essence of canella, 6 grammes;
Saccharine, 6 grammes;
Alcohol enough to make a litre.

This dressing is employed in regions which cannot be bandaged in the ordinary fashion.

The Toxic Effects of Gallic Acid.

In a recent issue of the *New Zealand Medical Journal*, Dr. Thomas W. Bell contributes an interesting clinical note as to the possible poisonous effects of this remedy, which is regarded as harmless in anything like moderate quantities. A man, aged thirty-two, with internal hemorrhoids, has a venous oozing with each passage of the bowels; various applications, including iron and cold water, had been used without any permanent benefit. One morning, just after an evacuation, he applied to the bleeding pile some ung. gallæ cum opio (B. P.). The piles were not painful and on their being replaced all discomfort ceased. After a little while he had for the first time in his life a slight attack of hay asthma, which was referred to the probable inhalation of some irritant dust. Three or four days later, after a second use of the ointment he had a similar asthmatic attack, followed by an urticaria lasting three or four hours, but no relation of cause and effect was thought to exist between the remedy and the subsequent outbreak. As the hemorrhage still persisted after each motion, Dr. Bell ordered a three-grain tannin suppository a short time before and after each movement of the bowels. The sequel is stated by Dr. Bell as follows: "In the afternoon, feeling quite well, he inserted a suppository. In about four minutes the symptoms of the asthma began to show. I watched the case throughout. First, there was pain and a tight feeling under the sternum, and a trouble in breathing; the breathing got quicker and labored, accompanied with wheezing and an occasional cough—until, in about half an hour from the time when the suppository was introduced, all he could do was to lie on the bed gasping and straining for breath, face flushed, hot, and perspiring, rales and rhonchi all over chest, and pain on coughing. With each cough a little pellet of mucus was expelled. This condition lasted for another half-hour, and then the pain and rapidity of breathing began to subside, but then the attack of urticaria commenced. Starting about the head and neck, it extended all over the body, and became especially marked about the feet. The irritation and itching was intense. Some of the wheals were from two to three inches in diameter. At the end of about four hours the cough had stopped, the breathing had returned to normal, but the irritation of the skin continued in a less degree till next morning. The patient had never had any asthma, or anything approaching it, before or since, nor have any of his relatives ever had anything of the kind. Nor has he ever had urticaria or any skin eruption whatever." The physician was at a loss to account for these phenomena except as the effects of the gallic acid. No such results followed the use of various other remedies. None of the standard text-books attribute toxic qualities to gallic acid, either in the line of vaso-motor disturbance or that of skin eruption. Some peculiar idiosyncrasy seems to have existed in this patient.—*Medical Record.*

GYNECOLOGY.

Influence of Mineral Baths in Normal and Pathological Menstruation.

Most balneologists regard menstruation as a contra-indication for baths, and these are discontinued during that period at every bath-cure. However, the investigations of Makaveyef show that in abnormal menstruation and in diseases of the sexual organs mineral baths should be continued, since they improve the general condition of the patient, diminish and shorten abundant menstruation, and augment a scanty flow. Artificial salt baths, according to the author, may be employed for the same purpose, their effect being similar. They are to be recommended to cause contraction of the womb and diminish the quantity of blood in it.—*Vratch*, Nos. 24 and 25, 1893.—*Universal Med. Jour.*

Williams on Papillomatous Tumors of the Ovaries.

The author groups together, as follows, the salient features of the two forms.

1. Most papillomatous cystomata are not developed within the broad ligament, the majority of intraligamentous papillomatous growths being of other than ovarian origin.

2. These growths are derived either from the Graafian follicle or germinal epithelium; their origin from the Wolffian body or from the tubal epithelium, while possible, has yet to be demonstrated.

3. As the origin of both the ciliated and non-ciliated papillomatous growths is identical, there is no justification for considering them as constituting two distinct classes of growths.

4. Polymorphism of the epithelium is not characteristic of ciliated papillomatous growths.

5. The formation of psammoma bodies is not pathognomonic of the ciliated papillomatous cystomata, for they occur in the superficial and non-ciliated varieties, and also in the normal ovary and tube, as well as in other parts of the body.

6. Superficial papillomata are of far more frequent occurrence than is generally supposed.

7. They are very closely related to the papillomatous cystomata, and are always derived from the germinal epithelium.

8. All varieties of papillomatous growths of the ovary have a marked tendency toward the formation of secondary growths. The majority of secondary growths are produced by mere extension of the growth by continuity of tissue, or by implantation of small particles of the tumor upon the peritoneum. In rare instances, true metastases may be formed.

9. The papillomatous tumors possess a marked tendency to become malignant, and even the anatomically-benign growths, in view of their tendency to the formation of secondary growths, are to be considered as clinically malignant.

10. The results of operations, even after the formation of secondary growths upon the peritoneum, are quite satisfactory.—*Johns Hopkins Hosp. Rep.*, vol. iii., 1893.

Suture After Laparotomy.

Howitz, of Copenhagen, at the recent Surgical Congress held at Gothenburg, discussed the comparative value of the methods and kinds of sutures which are used after laparotomy. According to him the abdominal hernia which occasionally occur after operation are dependent upon the manner in which the sutures are applied. Three factors determine the strength of the cicatrix: (1) The nature of the uniting surfaces; (2) the manner in which they are held together, and (3) the kind of suture used. As regards (1) the incision in the linea alba is not advantageous, since the conditions required for the formation of a sound scar are not present. In order to form a strong cicatrix the opposing surfaces of the incision must be fairly extensive and smooth, they should contain only a small amount of fat, and should be in apposition without much tension. In order to secure this condition of affairs the author advises that the incision should be made about two-thirds of an inch from the middle line, passing through the substance of the rectus muscle. As regards the method of suturing, he recommends the twisted suture, such as is used for harelip. In applying the suture a slightly curved needle is used, and only a small amount of peritoneum included in the suture. The sutures are made from silkworm gut. After the operation the patient is kept in bed for three or four weeks, so as to allow the scar to become firm.—*Sem. Med.; Brit. Med. Jour.*

Extra-Uterine Pregnancy.

Dr. G Haven, in *Bost. Med. and Surg. Jour.*, says: The following symptoms suggest ectopic pregnancy:

1. The absence of menstruation, or a flow coming at irregular intervals, and of uncertain duration.

2. Pain of a severe and spasmodic character, which may be permanent at first, then absent for some weeks, to return later with renewed vigor.

3. Vaginal discoloration—a symptom of some importance, yet often noticed in cases where some other form of pelvic tumor is present.

4. General signs of pregnancy, such as nausea, enlarged and tender breasts, increase in size of the papillæ, darkened aureolæ, milk in the breasts, *ballottement*, the presence of a tumor, irregular menstruation, and, possibly, gait.

5. The history of having had a child or miscarriage. This is important, as cases occuring in nulliparous women are rare.

6. Expulsion of decidua. This symptom is of great importance, although in the majority of cases we are not fortunate enough to have it present, the clot and shreds of tissue are thrown away before a microscopical examination can be made.

7. Increase in size of the uterus, with the fundus either pushed forward or to the right or left side.

8. Elongated, soft, and patulous cervix.

9. The appendages on one side containing a thin-walled and tender cyst. The fact, however, that a tumor is felt upon both sides should have no bearing upon the diagnosis, as one of the tumors may be due to extra-uterine pregnancy, and the other to some other form of tubal, ovarian or pelvic trouble.

10. Pulsation of vessels in neighborhood of cyst.

11. The rapid increase in the size of the tumor.

12. Presence of fetal heart sounds.

13. Presence of placental bruit.

14. Feeling the small parts of the child, either through the vagina or rectum, or by combined manipulation.

With diagnosis made, the right policy is to operate.

OBSTETRICS.

Helme (T. A.) on the Composition of the Fœtal Urine Secreted in Utero.

1. The fœtal kidneys secrete actively during intrauterine life.
2. The urine of the normal living fœtus contains urea.
3. The urine of the normal living fœtus contains kreatinin.
4. The fœtal renal excretion is a possible source of origin of the liquor amnii; this is shown by the presence of urea and kreatinin in both these fluids.
5. The presence of sulphates and phosphates in the liquor amnii, and their absence from the fœtal urine, would point to there being an additional source of origin of the liquor amnii.

The Dangers and Avoidance of Ergot in Obstetrics.

In the *Columbus Med. Jour.*, Crosslands has an article upon this subject, in which, after quoting his own experience and the instructions given by the standard text-books, he reaches these conclusions:

Ergot is extensively used to prevent an imaginary danger. In cases where its use seems most indicated, better results are obtained without than with them.

Its positive action blinds us to its possible dangers. The evil it does is often credited to other causes.

Administered, it is a potential force over which we have little or no control.

When the natural forces are insufficient, there are other means which are efficient, harmless, and controllable.

When all other means fail, forceps is the final resort for delivery through the natural passages.

ARMY AND NAVY.

U. S. ARMY, FROM NOVEMBER 26, 1893, TO DECEMBER 2, 1893.

First Lieutenant Alexander N. Stark, Assistant Surgeon, U. S. Army is relieved from duty at Fort Clark, Texas, and will report in person to the commanding officer, Fort Sam Houston, Texas for duty at that post.

Forty-seventh semi-annual meeting of the Northwestern Ohio Medical Association will be held at Toledo, Ohio, Thursday and Friday, Dec. 14 and 15, 1893.

Session to be held in Y. M. C. A. Rooms, Cor. of Oak and Summit Sts.

NEWS AND MISCELLANY.

Improved Service to Cincinnati & St. Louis.

The Baltimore & Ohio Southwestern Limited, leaving Market Street 11.26 A. M., and the fast Express, leaving at 9.58 P. M., and leaving 24th and Chestnut Streets 11.42 A. M. and 10.15 P. M., for Cincinnati and St. Louis, are now equipped with a complete Dining Car service, built expressly for these trains by the Pullman Company. Pullman Dining Cars are also attached to Royal Blue Line trains leaving Market Street 11.26 A. M., 7.22 P. M., and leaving 24th and Chestnut Streets 11.42 A. M., 1.35 and 7.38 P. M. daily for Baltimore and Washington.

Of Interest to Travelers.

The Baltimore and Ohio Railroad announces that they have placed on sale round trip tickets at reduced rates to the Winter Resorts in Florida and the South, and also to such points of interest as Luray, Natural Bridge and Gettysburg. This company has also arranged to place on sale excursion tickets to San Francisco and other points in California on account of the Mid-Winter Fair, at unusually low rates. Excursion tickets are now on sale to Baltimore and Washington via the famous Royal Blue Line.

With its vestibuled train service via Washington to Cincinnati, St. Louis and Chicago, the B. & O. is in the best of condition to handle western and southern travel. That the line is a popular one, is attested by the immense World's Fair business handled this summer.

Those contemplating a trip west or south this winter, should write to James Potter, Div. Pass. Agent, B. & O. R. R., 833 Chestnut St., Philadelphia, Pa., for rates and other information.

Reduced Rates for the Holidays.

In pursuance of its liberal policy, the Baltimore and Ohio Railroad Company announces that excursion tickets will be sold between all stations on its lines east of the Ohio River during the Christmas and New Year holidays at reduced rates. The tickets will be sold for all trains December 23, 24, 25, 30, 31 and January 1, and will be valid for the return journey on all trains until January 3 inclusive.

Through Cars to New Orleans.

Among the many important improvements in the Baltimore and Ohio Railroad train service is the addition of through pullman Sleeping Cars from New York to New Orleans, via Philadelphia, Baltimore, Washington, and the famous Shenandoah Valley route, passing through Roanoke, Knoxville, Chattanooga and Birmingham. The train leaves New York daily at 5.00 P. M.; Philadelphia, 12th and Market Sts., 7.22 P. M and 24th and Chestnut Sts. 7.38 P. M., reaching Roanoke at 7.50 A. M.; Knoxville, 3.52 P. M., and New Orleans, 12.45 P. M.

This train is very handsomely appointed, being vestibuted throughout, and has Dining Car service New York to Chattanooga. At Washington a Pullman Sleeping Car, which runs through to Memphis, is added to the train.